





T.E. French del. 1914

A.N. Macdonald Sc.



## EDUCATIONAL PSYCHOLOGY MONOGRAPHS

- No. 1. Moto-Sensory Development. Dearborn. \$1.50.
- No. 2. Mental Fatigue. Offner. Whipple. \$1.25.
- No. 3. Backward and Feeble-Minded Children. Huey. \$1.40.
- No. 4. When Should a Child Begin School. Winch. \$1.25.
- No. 5. Spelling Efficiency in Relation to Age, Grade and Sex, and  
The Question of Transfer. Wallin. \$1.25.
- No. 6. Relative Efficiency of Phonetic Alphabets. (Paper cover.)  
Whipple. 35 cents.
- No. 7. Experimental Studies of Mental Defectives. Wallin. \$1.40.
- No. 8. Variations in the Grades of High School Pupils. Gray. \$1.25.
- No. 9. How I Kept My Baby Well. Noyes. \$1.40.
- No. 10. Marking System in Theory and Practice, The. Finkel-  
stein. \$1.00.
- No. 11. Inductive Versus Deductive Methods in Teaching. Winch.  
\$1.40.
- No. 12. Children's Perception. Winch. \$1.60.
- No. 13. Psychological Methods of Testing Intelligence, The. Stern.  
Whipple. \$1.25.
- No. 14. Mentality of the Criminal Woman, The. Weidensall. \$2.00.
- No. 15. The General Value of Visual Sense Training in Children.  
Wang. \$1.00.
- No. 16. Doctrine of Formal Discipline in the Light of Experimental  
Investigation, The. Hewins. \$1.25.
- No. 17. Experimental Determination of Mental Discipline in School  
Studies, The. Rugg. \$1.50.
- No. 18. Stanford Revision and Extension of the Binet-Simon Intelli-  
gence Scale, The. Terman. \$1.40.
- No. 19. Psychology and Pedagogy of Anger, The. Richardson.  
\$1.25.
- No. 20. Picture Completion Test, The. Pintner and Anderson.  
\$1.25.
- No. 21. Deficiency and Delinquency: An Interpretation of Mental  
Testing. Miner. circa 380 pages. \$2.25.
- No. 22. Influence of Age and Experience on Correlations Concerned  
With Mental Testing. Jones. \$1.25.
- No. 23. Periodicity With Reference to Mental and Physical Ability.  
Peaks. \$1.25.

WARWICK & YORK, Inc.  
(Founded by H. E. Buchholz)  
BALTIMORE

**THE PSYCHOLOGY AND  
PEDAGOGY OF ANGER**

**COPYRIGHT, 1918**  
**BY**  
**WARWICK & YORK, Inc.**

**Educational Psychology Monographs**

This volume, which is number 19 in the series, was edited by J. Carleton Bell

# THE PSYCHOLOGY AND PEDAGOGY OF ANGER

By

ROY FRANKLIN RICHARDSON

Professor of Education, University of Maine



BALTIMORE  
WARWICK & YORK, INC.  
1918





## CONTENTS

Preface .....	3
---------------	---

Introduction .....	5
--------------------	---

### CHAPTER ONE

Mental Situation Stimulating Anger.....	11
---	----

### CHAPTER TWO

Behavior of Consciousness.....	31
--------------------------------	----

### CHAPTER THREE

Disappearance of Anger.....	53
-----------------------------	----

### CHAPTER FOUR

Educational Function.....	83
---------------------------	----

Bibliography .....	99
--------------------	----

Index .....	103
-------------	-----



## PREFACE

The importance of the study of the emotions in relation to human conduct is well understood. Just how consciousness behaves under the influence of the fundamental human emotions like fear and anger, is one of vital interest to the psychologist and educator. It has always been difficult to study the structural side of our emotions because of an inability to control voluntarily our emotions for purposes of introspection. The structure of emotions is primarily important in so far as structure may allow an interpretation of function. The study of the emotions has for the most part been limited to theoretical discussions based on the observations of normal and abnormal persons and on the casual introspection of individual authors. This work is an attempt to study systematically the emotion of anger in relation to the behavior of consciousness, the ideas and feelings associated in the development of anger, the reactive side of consciousness under the influence of anger, individual differences in behavior, manner of the disappearance and diminution of anger, devices used in the control and facilitation of the emotion, and the conscious after-effects including the inter-relation of anger and other feelings, emotions and attitudes which follow. The education of the emotions was first voiced by Aristotle who indicated that one of the aims of education should be to teach men to be angry aright.

The author is under great obligations to President G. Stanley Hall, for without his inspiration the investigation would never have been begun or completed. A number of persons cooperated in the study both by criticism and observation of emotional experiences. The study would not have been possible without the kindly cooperation of the following: Professor and Mrs. G. E. Freeland, Mr. A. E. Hamilton, Dr. G. E. Jones, Dr. George Bivin, Dr. Frank E. Howard, Dr. W. T. Sangor, Dr. K. K. Robinson, Mr. D. I. Pope, Mrs. R. F. Richardson, Dr. E. O. Finkenbinder, Dr. Raymond Bellamy.

R. F. R.

University of Maine

June 20, 1917



## INTRODUCTION

Although the emotions are recognized as among the most important mental phenomena, exerting a marked influence on other mental processes, they have had comparatively little systematic investigation. We have our casual descriptions of emotions in terms of feelings, sensations and physiological effects. We have our theories, accounting for the expression of the emotions, and our theories of the constituents of the emotive consciousness. The functional side of emotions, emphasizing the behavior of consciousness, has been for the most part neglected. In looking over the literature on emotions, one is impressed by its theoretical and opinionated trend. Much of it is based on casual individual observations. Attention has for the most part been directed to the most intense emotional experiences, neglecting the smaller emotions, important as they are in the behavior of consciousness. Then psychology has concerned itself with the exciting period of the emotion, disregarding the consciousness preceding the emotion and that after the emotion has disappeared. From the functional aspect of emotions, some of the *questions* which invite study are as follows: 1. the mental situation, including the fore-period from which the emotion develops; 2. the behavior of consciousness during the period the emotion exists; 3. the manner of disappearance and diminution of the emotion; 4. the effect in consciousness after the emotion has disappeared; 5. individual differences in emotional life.

The statement of Wundt (21) and Külpe (14) concerning voluntary action, that its mere period of duration is but a small part of its psychological significance, may well be said of emotions. Wundt suggests the close relation between the emotion and volitional action. A volitional process that passes into an external act, he defines as an emo-

tion which closes with a "pantomimetic" movement. Ach (1), in his experiments with the will, distinguishes in each experiment a fore, mid and after period. In our emotional experiences, it is true to a marked degree that we are pre-disposed and predetermined to a specific emotional excitement by temporary or permanent dispositions and attitudes.

METHODS. The method in the present study has been to observe anger introspectively as it appears in every-day life. Ten graduate students of Clark University and two persons outside of the University volunteered to observe their emotions for a period of at least three months and report to the writer each day from the notes of their introspections. These persons were asked to observe all instances of anger and fear no matter how minute. Only anger will be used in the present study. They were asked to observe the conscious fore-period before the emotion begins, the development of the emotion, the disappearance, the diminution and the consciousness after the emotion has disappeared, which is recognized as having been influenced by the emotion.

Historically, three methods have been used in studying the emotions. Casual individual introspection is the earliest and is consequently the basis for most of the literature. Bain (2) and Ribot (16) were among the first to employ this method extensively. Observations of the behavior of normal and abnormal persons have given some results. The questionnaire method used by Dr. Hall (11) has shown the wide range of objective reactions and objects of anger.

Both anger and fear are deep rooted psychic strata. Introspections reveal motives of selfish, unsocial and unlawful character, springing from a level lower than the social man. All observers have been quite frank in giving the full introspections, even when their most private and personal matters were concerned. Where illustrative material is used, it has been necessary to remove the personal element,

as in many instances, others besides the observer were concerned. This revision has been the work of the writer. The essential psychological factor is unchanged and the words of the observers are used as nearly as possible. The twelve persons will be called by the first twelve letters of the alphabet, and other persons named in the introspections will be called X. Y. and Z. Ten of the observers were graduate men students of psychology. Seven of these had had considerable experience in introspection under controlled laboratory conditions. Most of the illustrative data will be taken from the observations of A. B. C. D. E. F. and G. who are the most experienced observers.

No apology is offered for this study because of the uncontrolled conditions of introspection. Emotions are involuntary processes and consequently do not lend themselves to voluntary control necessary for laboratory technique. The emotion springs from an antecedent complex combined with a present idea. The fact that anger does not develop from a single experience but is a predetermined consciousness usually cumulative in character, makes voluntary origin difficult. Even when the individual is aware of the antecedent which tends to give rise to anger, the voluntary combination with a present idea is unsuccessful. A further difficulty in introspection is the tendency of the emotion to disappear as a result of the act of introspection. It occurs frequently in the data that a further development of the emotion is entirely cut off by introspection. However, attention to the situation giving rise to anger frequently reinstates the emotion, if the feeling background is intense enough. It was necessary to instruct the observers to allow their emotions to run their usual course and note the facts of behavior at convenient times. The purpose of this study is to investigate the behavior of consciousness in the development, expression and disappearance of anger. The observers were asked to direct their observation especially to the behavior side of

consciousness. It is believed, that regardless of the necessary uncontrolled conditions of introspection, that a systematic observation of both mild and intense experiences of anger by a number of observers over an extended period of time will add to a better comprehension of the functional character of this one of the fundamental emotions.



**MENTAL SITUATION STIMULATING  
ANGER**



## CHAPTER ONE

### MENTAL SITUATION STIMULATING ANGER

Professor Titchener (19) states concerning emotions in general three essential factors for their formation. First, a series of ideas shall be interrupted by a vivid feeling; second, the feeling shall mirror a situation or incident in the outside world; and third, the feeling shall be enriched by organic sensations created by the course of bodily adjustment to the situation. It has been well agreed from casual introspection that the stimulus to an emotion is a total mental situation or predicament. It is evidently necessary in the psychology of the emotions that each emotion should be studied in connection with its predetermining mental situation giving rise to it. Anger because of its slowness to develop, lends itself more readily to a study of the situation from which it arises, than some other emotions.

It is well known that there is little constancy in the outside situation, associated with the emotion of anger. What one will take as an insult, another will regard as a joke. With the same individual, what will at one time excite anger, will at another be scarcely noticed. We commonly say, referring to some incident, "There was nothing for him to be angry about," and the statement may be correct if the outside situation is viewed as the stimulus to the emotion. With the insane and hysterical, an observer is often baffled by the apparently harmless idea that will excite anger. The fact is, the situation stimulating anger is a psychic one. We fail in viewing our emotional life in the same manner as we do in observing our sensations. Whatever the outside conditions, it is the psychic situation as only a partial reflection of outside conditions, that is of primary importance. A few instances of the current views of the situation exciting anger may be given. What may be called a genetic view is illustrated in McDougall's (5) statement, "The condition

of its (anger) excitement is rather any opposition to the free exercise of any impulse, any obstruction to the activity to which the creature is impelled by any one of the other instincts." Dewey (6) in his conception of instincts has pointed out that we are not angry when we are fighting successfully. Only when the pugnacious instinct is impeded does emotion arise. An introspective view may be taken from Bain (2), "When we have suffered harm at the hands of another, it leaves a sting in the violation of the sanctity of our feelings. This pre-supposes a sentiment of self regarding pride, the presence of which gives rise to the best developed form of anger." David Irons (12), who did some keen work in the analysis of the emotions, does not qualify his statement that anger appears only when we feel that we have been injured.

From the pathological side, Feré (7) and Magnan (11) have described slow accumulation of anger in paranoiacs, which seems to reenforce the casual introspective view stated above. These insane persons first believe they are persecuted. They suspect all about them. Even their very best friends are trying to injure their business or reputation. Gradually reactionary impulses begin and they themselves become the persecutors and concern themselves with the business of revenge. They find gratification in every sort of angry outburst,—insult, abuse, threat, murderous attack, irony, witticism, etc.

The same view has been advanced by Steinmetz (18) in the observation of the behavior of primitive people. He holds that revenge is essentially rooted in the feeling of power and superiority. It arises upon the experience of injury and its aim is to enhance self-feeling, which has been lowered by the injury suffered.

The next few pages will be devoted to an examination of the mental situations from which anger develops as found in the results of the introspections. About six hundred intro-

spectations from the various observers have been used for this study.

*Feelings of Irritation.* One of the characteristic mental situations from which anger arises is that connected with feelings of irritation. These feelings are described as unpleasant nervous tension with a tendency to motor activity. Awareness of the feeling may be present while attention is directed elsewhere. It may or may not be referred to any particular incident. C.—“It is a sort of diffused unpleasant consciousness that things in general are going wrong.”

Irritation in connection with pain or illness is a condition from which anger may develop. From this a trivial incident may give rise to anger. A note from E's records says, “I had a severe headache to-day and felt irritable. When X. would try to sympathize with me, the irritation would increase and I tended to be angry.” G, who has relatively few emotions of anger, introspected upon ten cases of anger, arising from a fore-period of irritation during a day's illness. Subject I. states with reference to pain, “While the pain was on I felt as though I wanted to be angry at somebody or something, X. spoke to me and at once I was angry.” Feelings of irritation may increase, gradually, accompanying the increased intensity of pain. A. states, “Irritableness at the first beginning of the pain increased to intense anger at the moment the pain was most severe. There was a strong motor tension in the hands and face muscles with the impulse to look about, vaguely aware that I was trying to find something to refer the anger to . . . . A decrease of the pain was accompanied by a decrease of the anger to a feeling of irritation again.”

Feelings of irritation follow as a result of the thwarting of some desire or mental attitude and are consequently predetermined by the attitude of the moment. From this, anger develops for the most part, as a result of a series of stimuli, which have a cumulative effect. Each thwarting

of the impulse intensifies the irritation until anger is developed. One or two failures may stimulate unpleasant feelings, which at the time are ignored; but with an increase of the number of stimuli, there is an accumulative effect in which the awareness of the previous failures becomes more intense than at the moment when they occurred. The following from B.'s observations will illustrate, "I was writing a letter to an important personage and was making special effort to write it neatly. I made an error and felt unpleasantly irritated. Still feeling quite unpleasant, I turned to look for my eraser and could not find it. I looked in several places. Each failure was followed by a sudden increase in intensity of unpleasant feelings." Finally B. found himself using defamatory language prolifically, giving expression to a rather well developed case of anger. One is usually aware in anger of this type, that the emotion is the cumulative effect of a number of previous stimuli. It appears from the reports, that if the mental predisposition is intense enough, one or two failures may suffice to excite anger. In general the stronger the predisposition, the less number of failures is required before anger is fully developed.

Another characteristic of the feeling of irritation is its indefinite objective reference. It may not refer definitely to any object at first. The tendency is usually present to refer it to some object or person, regardless of the real cause of the feeling. E. states, "I felt I wanted to get angry at somebody or something and I did not care much what." While it is common with all the persons studied, to be irritated and burst out angrily at objects, the tendency to transfer the anger from objects which may be the real objective cause to unoffending persons, is a matter in which there is a wide individual difference. C. when irritated by objects, finds a partial relief if he can lay the blame on some person and take an imaginary vent against him. He states, "I

have been cross and grouchy all day; 'felt out' with everybody. Several times the association of X. and Y. came up with a little rising anger and an attitude that they were somehow to be blamed. I was aware that they were not to be blamed, but at times I would find myself ignoring this and taking pleasure in criticising them adversely. "This tendency to personify the source of anger is illustrated in another incident from C. He lost his umbrella. He looked for it in several places with an increased feeling of irritation; following a line of other associations, he imagined Z., a person whom he dislikes, walking off with it. He says, "All this was mildly pleasant. I was scarcely aware how improbable it was that Z. had taken it, till the act of introspecting on the emotion. I really wanted to believe that he had taken it. "The personal objective reference to somewhat suppressed feelings of irritation frequently facilitates the sudden development of the emotion. The tendency to refer the anger to some innocent person, ignoring for the moment the real facts and forgetting one's sense of justice for the time being, is a matter in which there are marked individual differences in the subjects studied.

It is a common characteristic of the initial stage of anger, that although there is an awareness that the emotion is due to a series of irritating stimuli, the entire situation exciting the anger is ignored and the anger is referred to some person, frequently one recently associated in time. Thus objectified, anger seems to find a more ready expression. Anger is more successfully developed from a fore-period of irritation if the present predicament is in any way associated with a person or situation against which there is already an emotional disposition of dislike. A feeling of pleasurable satisfaction is often reported to follow the successful expression of anger after feelings of irritation.

Anger with a fore-period of irritation is common with all the subjects studied, but the manner in which the anger

arises from these feelings is a matter of wide individual difference. They all get angry at objects when they act as hindrances. With B. and C., who live alone, this tendency is more marked. With all the persons studied, anger with a fore-period of irritation occurs more frequently against objects and situations than against persons. When persons are involved in anger of this type, they are usually those with whom there is close intimacy or with servants and children.

The sentiment of justice may facilitate the development of anger arising from feelings of irritation. Irritable feelings may more readily develop into anger if a situation is associated in which fairness and justice are violated, although the point of justice may be far removed from the actual cause of the irritation. Under the influence of irritation, there is frequently a little more sensitiveness to injustice if the idea of unfairness can facilitate in the objective reference to the emotion. The following instance will illustrate. A. was walking along the street at night in an irritable state of mind in connection with a series of incidents just past. In this state of mind he came to a place where a new house was being built and the builders had left an accumulation of dirt on the sidewalk. When it rained, the water would collect making the walk bad. He had previously noted that they had made enough progress with the building that it was unnecessary to leave the dirt on the walk. "On this occasion," he states, "I now become quite indignant, and suddenly found myself in imagination telephoning the street commissioner in an angry attitude and tone of voice, telling him about the dirt and where the house was located, and ending with the sentence, 'It is an outrage to tax payers.'" But this did not fully satisfy his resentment. He imagined himself the next day walking up to the overseer of the construction gang and assuming a rather indignant air, telling him among other things that



the way he had left the walk was an outrage to the public. On the other hand, the sense of justice may be ignored for the time if it does not aid expression. In some extreme cases the subject may assume a make-believe attitude and trump up reasons to suit his own ends regardless of the facts. The tendency is strong to give some justifiable expression to the present mental predicament. In such cases reason serves the purpose of feeling. All other mental processes may become subservient to the rising indignation till the point of anger is reached, but with the expression of anger, the illusion of fairness usually disappears. The behavior that seemed so commendable while angry may excite shame or regret after the emotion has been vented.

*Negative Self-feeling.* A second characteristic mental situation from which anger arises, is that connected with negative self-feeling; the self-feeling has been lowered and anger follows. In the observation of all the observers, it appears at times in the initial stage of anger. Whatever outside situation occasions lowered self-feeling may indirectly give rise to anger. And just as there are feelings of irritation, which do not pass into anger, so there are negative self-feelings which are not followed by anger. In the description of this feeling, it appears in marked contrast to the anger that follows. As to time, it may last but a moment before anger arises. In other instances the feeling of humiliation may be rather prolonged or repeated before anger arises. The feeling is described as unpleasant, as a lack of motor tension, a feeling like shrinking up, an impulse to get away, a confused inco-ordinated state of mind. A rather wide vocabulary referring to self and the feeling side of experience is used by the subjects to designate this feeling in colloquial language. Examples of such phrases from the observations are as follows:—"I felt sat on," "Was humiliated," "Felt inefficient," "Felt imposed upon," "Felt stepped on," "A feeling of self depreciation," "Felt offended," "A

feeling of subjection," "Felt as if he thought I were no good," "Felt worried," "Felt as if he were hitting at me," "Felt that what he said reflected on my ability," "Disappointed in myself," "Felt ashamed," "My feelings were wounded," "Felt that that was insult added to injury," "Felt slighted," "Feeling of abasement," "I was embarrassed," "Felt as if I had been caught with the goods on."

Unlike the feeling of irritation, negative self-feeling has a more definite reference to the outside situation and for the most part refers to persons. It will be noted that the origin of anger from the mental situation of lowered self-feeling, and that from a condition of irritable feelings, comes about by quite different processes. The latter is reached by an increased complexity till the anger point is suddenly attained. In the former case the anger comes about as a rather sudden reaction from a state of consciousness that is in marked contrast to anger. Notes from the reports will illustrate this characteristic. B. had made some errors at a public meeting. X. in a speech jokingly called attention to the errors. At first B. was confused and felt a little worried and embarrassed. In a few moments he found himself mildly angry at X. and was planning to retaliate. B. states that his anger did not refer to the fact that he had made the error, but to X. who had humiliated him by calling public attention to it. F. went to get a check cashed and was refused. He states, "I felt belittled and became indignant as I walked away. . . . With the appearance of the imagery of another person getting his check cashed the day before, I became quite angry." He adds that he was not angry because of the failure to get the check cashed, but because of the discrimination against himself. The anger referred to the cashier. The idea that he was acting according to rules and not personally responsible, appeared, but was ignored by a recall of the imagery of the other person getting his check cashed.

Negative self-feeling appears rather suddenly without any definite conscious fore-period of its own. It is a state of consciousness predetermined by pleasurable feelings of self regard. In taking the report of C's emotions one evening, there was found to be an unusual number. He had been usually observing from one to four emotions each day, with occasionally a day having no experiences of anger. On this particular day he had observed and taken notes on twelve rather strongly developed cases of anger. An inquiry into the cause showed nothing except that he had felt extra well all day and had turned off more than the usual amount of work. This was a disturbing situation in connection with evidence that had previously been collected from G. and D. These two persons have few emotions of anger and have gone over a week with no experience of anger. On December 4th, D. took observations on four cases of anger. On inquiry it was found that he had been ill and not slept the night before. G. on the two days that he was ill introspected on ten cases of anger. An examination of G's and D's reports indicate a fore-period of irritable feelings or a lack of immediate conscious fore-period. In none of these cases was there any indication of lowered self-feeling in the fore-period of the emotion, while with each of the introspections of C. on the day he felt extra well and reported on the unusual number of twelve cases, there was a fore-period of negative self-feeling. With A. on the days when he feels best, there is an increase in the number of cases of anger with an initial lowered self-feeling. Such evidences as we have, indicate that anger with a fore-period of negative self-feeling occurs most readily when the sentiment of self-regard is active,—on the days when the person is well pleased with himself. It is true that the play of this sentiment only appears in consciousness, when it has been interfered with or enhanced. It makes up an essential mental pre-disposition in connection with the situation stimulat-

ing anger. The following note from C's observations will illustrate. C. met X. and spoke to him; X. paid no attention. C. states, "For a moment I felt humiliated. . . . I said to myself, 'He does not know my importance.' C. then became quite angry thinking cutting remarks about X. and ending the emotion by finding an excuse for X's not seeing him.

Any remark, suggestion, chance association, it may be, attitude of another or incident, which in any way lowers the sentiment of self-respect may stimulate anger. In this regard there is a wide individual difference with the persons studied and with the same person at different times. A trivial incident may lower the play of the self-regarding sentiment and consequently give rise to anger, while at other times a direct thrust at one's honor may be ignored. The personality of the offender, his social and intellectual standing, his general demeanor and attitude, play an important part in the entire emotional situation, but at times personality is ignored and a "chip is carried on the shoulder" for the chance passer-by.

It appears in the results that the anger of the person who is not in authority against the one who is, or the anger of the man lower down against the one higher up, usually has a fore-period of negative self-feeling. A mental disposition toward the one in power in addition to the sentiment of self-regard, is a predetermining mental situation in exciting lowered self-feeling and consequently anger. The most intense instances of anger that C. D. and E. experienced were against persons in power. D.—"I was aware they were in authority and were taking advantage of it to run us out. I felt a little humiliated but not angry as I left the room. It occurred to me they were rather small in usurping the place." A little later D. became quite angry and carried on in imagination a rather extensive verbal combat with the usurpers in which he came out victor. E. states in his ob-

servation, "If X. had been an ordinary man, I would not have given the occasion a second thought. But being very high up. . . I was inclined to take less off of him than those I consider as not knowing better."

On the other hand a certain mental disposition toward the person lower down in connection with the self-regarding sentiment may be a precondition of anger. Too great familiarity from an inferior may momentarily lower the self-regarding sentiment to his level and in consequence excite anger; we do not resent a slap on the back by one whom we admire or recognize as our superior, but we do from our inferior. The same act from the one may heighten our self-respect while from the other it is lowered. D. reports a case of anger when he was in a crowd. A boy kept purposely stepping on his heels. He states, "I was not hurt but he acted too familiar for a boy under the circumstances. I took his attitude as a personal matter and felt a little humiliated." A. reporting a case of anger stimulated by a person whom he holds in low esteem, says, "It was not what X. did so much, but it was his familiar confidential attitude before others that embarrassed me."

It appears frequently in the observations that it is not what is done or said, so much as it is the attitude of the person, that is so offensive. A too positive and aggressive action, a too great display of wisdom, a too familiar or condescending demeanor, may be the essential element in the stimulus to anger. The following phrases are noted by the different subjects as being an important part of the situation stimulating anger of the type now being treated. C.—"I resented his too dignified air more than anything else." G.—"What angered me most was his condescending attitude as if he knew it all." I.—"He acted too wise and I was aware he was trying to lord it over us. That was the most offensive part." H.—"He sat and stared at me as if he thought I didn't know what I was talking about." F.—"He took on

a wise air implying that he had already passed through the stage in which I now was." E.—"It was not his statement so much as it was his rather spiteful attitude that angered me." A.—"It was not what he said. It was his haughty air and little condescending laugh in dismissing the matter that rang in my ears."

While in the presence of a situation that lowers self-feeling, even though persons may not be connected with the situation, it is a common characteristic to refer the anger to some person. The bounds of justice may be, for the moment, overstepped. The dim awareness with some, that the person is not to be blamed, is ignored for the time, while the tendency is strongest in consciousness to give expression to the emotion. The individual differences here are quite marked. G. apparently has developed a habit of referring his anger to a principle, ignoring the personality. In many of his observations, persons were connected with a situation, but were neglected in his attention to the principle violated. A business man had told him an untruth causing him difficulty. G. states, "I was not angry at the man. That was his way of doing business." In the course of his emotional experience, his anger became rather intense, referring to the business ethics practiced. The degree in which the sense of justice is ignored under the influence of anger of this type is also a matter of wide individual difference.

In the observations collected, anger at one's self appears quite frequently. There have been no cases found, in which anger at one's self develops purely from a fore-period of irritation. The subject takes the matter to himself and feels a little humiliated and degraded and may react against his own personality in the same manner that he would against another. Two observers, B. and G., quite frequently get angry at themselves. A. reports that this sort of anger rarely occurs with him. G. observes the following case. After he had been repeatedly humiliated by his own failure,

he says, "I felt as if I were so inefficient. I said to myself, 'If I had a man working for me and he should do work in that manner I would discharge him.'". G. then continued to talk to himself like another person in rather severe condemnatory language. B. was reading a book. He could not understand the author's demonstration. He had made several trials at it. He states, "I felt as if I must be stupid, somehow; there was a slight feeling of worry and dejection. The idea of my stupidity was followed by anger at myself for being so stupid. I clinched my fists and threw my arms in angry demonstration, feeling as if I would like to pummel myself. I went over the demonstration again with an attitude of carefulness and finally concluded that it was the author who was hazy instead of myself. I slammed the book down on the table and broke forth angrily, 'You, X., are the one who is stupid, you don't make it clear.' This anger at the author was rather pleasant in quality. I felt a sort of triumph over him."

Another situation quite common in the origin of anger with a fore-period of lowered self-feeling, is its appearance at times with greater intensity after the actual outside stimulus is passed. One becomes more angry in recalling afterward what was said, than he was at the time of the offense. This belated origin of anger appears in the observations of all the subjects studied. It may be noted that anger with a fore-period of irritation does not appear in this retarded manner. In the recall of an incident in imagination, anger may become quite intense; while it may be at the time of the incident, there was no awareness of any tendency to anger. Mild anger at the time of the initial stimulus may become intensified in its recall. In such cases there was evidently some element lacking in the mental situation stimulating anger. An offensive statement in the heat of an irascible discussion may be ignored. A rather severe thrust may seem proper, but when recalled in connection with another

mental situation, the emotional content may be entirely changed. X. in the course of an argument with E. implied, "You never will know as much about the subject under discussion as Y." "At the time I noted his statement and was aware that it was a thrust at myself, but I had no feeling about the matter then. I considered that I was producing the better argument, and his personal thrust I was aware was an admission on his part that he knew I was. To-day I recalled his statement and felt degraded and angry." Then C. proceeded to plan a series of cutting remarks that he would like to tell X. In some instances the presence of a too active aggressive attitude at the time of the stimulus seems to predispose against a too easy lowering of self-esteem, and consequently anger with a fore-period of negative self-feeling does not appear. But let one momentarily lose faith in his point of view or fail in words to express it, and he becomes more sensitive to the thrusts of his opponent's argument.

Another factor partly accounts for the greater emotional intensity of the recalled incident. The conventional control of emotions during social contact may be relaxed during the memory recall. The same ethical standard is not required for one's private thinking as in actual contact with others. In this respect there is rather wide individual difference with the subjects studied. Though in general with persons of rather intense emotions, there is a marked difference in the ethical standard they practice, when the incident is present to consciousness, and the standard used when the anger occurs from the imaged situation; with all persons studied at times during their most intense anger emotions, the imaginative reaction is far more crude and unethical, and consequently the imaged anger may be more intense. A third factor may be involved here. A personal thrust may be partly ignored at the time without lowered dignity because it is given with a smile or a friendly attitude,



but when recalled later, the friendliness may be neglected and consequently anger is more intense. A fourth condition that partly accounts for more intense anger in the imaged situation, is that the anger consciousness of this type is usually cumulative. With an entirely novel experience, a certain amount of resistance must be broken down before the emotion develops. The emotion seems to develop by a cumulative process through a series of stimuli. One personal thrust in a situation in which there is involved no previous emotional excitement, may be ignored or the humiliation may be borne at the time with no anger reactions; but when it is repeated one or more times under similar circumstances, there is present a characteristic mental situation for the development of anger. The repeated occurrence of the incident in the imagination intensifies the feelings till anger becomes fully developed. E.'s observations will illustrate. "During the argument with X., I was in splendid humor, enjoying myself to the fullest and naturally supposed everybody was." Referring to a statement made by X. during the argument, E. states, "The glow of the conflict had not entirely departed when I began to see his statement in an entirely new light as reflecting on myself, then I felt somewhat distressed and overcome to a slight degree, by a feeling of abasement but no resentment against X. The next day at ten o'clock I was recalling the events of the argument. There was still a feeling of abasement but now it stirred me to anger. I found myself going over it and thinking what I might have said, and what I would say the next time."

*Anger Without an Immediate Feeling Fore-period.* This study was begun tentatively with the view held by Wundt (21) that each emotion of anger has an immediate feeling fore-period. The study had not progressed far till this view had to be abandoned. It early appeared in the observations that anger may begin rather suddenly with no

initial feeling fore-period, which the observer is able to find. The subject reports that he suddenly finds himself in the midst of an emotion of anger before he is scarcely aware of it, and is giving verbal and motor expressions usually accompanying such emotions. In many of the emotions of this type there is evidence in the observations that the emotion refers to a previous emotional experience. From the mental disposition left over from the previous emotion, the emotion suddenly emerges without passing through the cumulative process that is necessary with an entirely novel emotional experience. In other words the way has previously been broken so that it is not necessary to break down the same amount of resistance. A. observes, "Sitting in my room, I imaged X. At once I was angry, motor expression not marked at first. X. was imaged in a rather positive and demonstrative attitude which he sometimes takes. I found myself with quite a good deal of motor activity saying in voco-motor fashion as if talking to X.— I was partly aware of three former disagreements with X., the imagery of the circumstances of the last one was most clearly defined. I imagined X. a little humbled by my remark. The emotional experience from the first was pleasant. I felt a little victorious in the imaginary act of dealing a telling thrust."

With all persons studied, there is evidence of a previously developed mental disposition against certain persons and against certain principles which allows the anger point to be reached in a short cut fashion. Anger is easily attained without the initial feeling either of irritation or lowered self-feeling. Anger that rises from this situation is usually pleasant in quality. The mental disposition which is connected with this sudden origin of anger may be present during the later recall of the emotion. It is also shown by the frequent re-occurrence that the same situation may repeatedly give rise to anger. B. has a rather strongly developed

sentiment against ministers who preach what they do not believe; G. against persons who do their work carelessly, especially manufacturers who send out goods of inferior quality. I. has a marked sentiment against acts of cruelty in the treatment of animals. D. reacts rather vigorously against persons who are disloyal to friendship. These sentiments go back to early experiences in the life of the individuals.

B. in talking with X. directed the conversation to ministers who preach what they really do not believe. He took Dr. Y. as an example. He had previously seen Dr. Y. drinking beer with the boys and had resented his behavior. He began to vituperate to X. against Y., giving instances and telling his opinion rather vigorously about such men who have a double personality. "Before I was scarcely aware of it, I was in the midst of motor and verbal expressions of righteous indignation. I enjoyed it all very much. I always take delight in making myself angry with ministers of this sort." B. has reported other instances of his anger against ministers of this type. A case from I. will illustrate further. "I had the same recurring anger for three weeks. A delivery boy who passes about the same time each day goes by whipping and abusing his horse. Anger arises each time the incident occurs. The sight made me pleasantly indignant. I have the image of an old German, living near my home as a child, who treated his horse so cruelly. The idea of telephoning to the police occurs to me, but the boys goes on and the idea is abandoned."



## **BEHAVIOR OF CONSCIOUSNESS**



## CHAPTER TWO

### BEHAVIOR OF CONSCIOUSNESS

Wundt (21) has pointed out that there are two types of reaction to an emotion, what he calls outer and inner volitional acts. The first refers to the external bodily expression of an emotion and the latter to the mental behavior. In the study of the emotions, attention has for the most part been directed to the former. Darwin's study of the emotions in man and animals, early called attention to the finer physical expressions of each emotion, explaining them as instinctive habits which were formerly useful. Darwin's study partly paved the way for the James-Lange theory, which maintains that what we experience as an emotion is but the sensation of the instinctive physical expression.

The aim of this chapter is to study the mental behavior during the conscious period the anger exists. It is recognized that the motor and physical expressions is primary and fundamental. For that reason it has served so adequately in the objective study of the emotion. What we shall attempt to study is the mental behavior of persons under the influence of anger. Ethics tells us how we ought to act when angry, but psychology has neglected to find out how in reality consciousness does behave when the emotional excitement is on. David Iron's (12) statement is still apropos. He writes, "The neglect of the reactive side of human consciousness is nowhere more conspicuous than in the case of the emotions."

The anger consciousness is characterized by heightened mental activity. A multiple number of images, attitudes, fluctuations of the emotional and feeling content appear in rapid succession till the emotion disappears. This statement is true for even the more tenuous instances of anger. In fact some of the milder experiences have the most marked changeableness of conscious content. Objectively there

may be little activity, while simultaneously on the mental side, there is a wealth of processes which must be considered in the psychology of the emotions.

After making a rather minute collection of the different kinds of mental reaction to anger, as shown by the introspections, it is observed that they fall into three rather clear types of conscious behavior. The first type is in the general direction of the emotive tendency and is the one that most impulsively follows on the stimulus of the emotion. It expresses pugnacity in some form. This type of reaction expresses a tendency similar to the basal instinct of the emotion of anger, such as thinking cutting remarks, imagining the offender's humiliation, hostile witticism, joking and sarcasm. This type of a reaction will be called *attributive reaction*. A second type is contrary to pugnacity; the instinctive impulse is reversed. A friendly attitude may be assumed toward the offender, an adequate excuse is found for his offense, an over polite attitude may be taken. This type of behavior will be called the *contrary reaction*. A third type is one that is entirely of a conscious attitudinal character. The subject becomes indifferent to the whole situation exciting the emotion. The offense may suddenly be apathetically ignored and the subject behaves unconcerned and assumes an "I don't care," or a "What-is-the-use" attitude. This will be called *indifferent reaction*. These three types of behavior are characteristic of the reactive consciousness to anger. The emotion may contain one, or it may contain all three of these types before it finally ends. Going over the results of the observations of all the subjects, about fourteen hundred sixty eight reactions are counted in the six hundred cases of anger studied. Seventy one per cent of such reactions are classified as attributive reaction, eighteen percent are the contrary type, and eleven percent are the indifferent.



The initial reaction to anger is always of the attributive type. Whatever other reactions may follow in the course of the entire anger period, the attributive reaction in some form is characteristic of the early stage of the emotion. The contrary and indifferent types are secondary in point of time and occur after the initial hostile tendencies have been restrained. If an emotion of anger is made up entirely of the attributive type, which frequently occurs, and continues for any length of time, it is always noted that some of the reactions are more crude and unsocial and others are refined, disguised it may be, covered up, and when the emotion is most intense whether it be in the initial stage or elsewhere, the unsocial attributive tendencies are usually found at those places.

#### ATTRIBUTIVE REACTION

The anger consciousness in its development, especially in its initial stage is characterized by restraint. The subject is aware of hostile unlawful impulses that must be controlled. Its initial stage is usually reported as unpleasant. The second characteristic of the anger consciousness is reaction of some sort. What takes place on the mental side, is along the line of least resistance for the moment. Mental life is rather versatile in providing subjective reaction to anger. Motor and visual imagery play an important role involving lessened resistance. A third characteristic of the anger consciousness is what the Germans call "*Verschiebung*." The emotive tendency is inhibited. A substitution follows for the tendencies restrained. It may be purely subjective or only partly subjective. But the subject in the observation of his anger is fully aware that he would behave in some more drastic fashion if the restraint were off.

*Substitution of Visual and Motor Imagery.* With the subjects studied there occurred no real pugnacious attack in which blows were struck except with those persons who

have the correction of children; there are also but few real quarrels reported. But the versatility of consciousness in substituting and providing merely mental reaction for other hostile tendencies that the subject really wished fulfilled is quite striking. Visual and motor imagery may take the place of tendencies which are inhibited and allow a successful expression. An observation from A. will illustrate. "I found myself saying cutting remarks as if speaking directly to X., and I planned a course of behavior toward him that I considered would humiliate him. I finally ended by imagining myself kicking him down the street, telling him I wanted no more to do with him. The imagery of this act was pleasant. I felt victorious. X. was imagined as penitent." The imagery of the pugnacious attack in some form is a quite common characteristic of the mental reaction to anger. It occurs after a period of restraint when there seems nothing else to be done; imagination and fancy appear at such a crisis and assume the role of a surrogate for hostile tendencies, which the subject has controlled. The awareness of the direct end of the initial tendency of the anger may be present in consciousness or the aim may be indefinite. Subject I. observes, "I felt as if I wanted to say something or do something at once that would get even with X. The thing to do was vague, but the impulse to do something in a hostile manner was strong." The aim of behavior may be rather definitely formed in the early stage of the anger consciousness as soon as the irascible feelings are definitely referred to some object. An illustration from A. follows:—"The impulse to take X. (a child) and shake him, was strong on the first stimulus of the emotion; suppressing this I spoke crossly to him, at the same time there appeared motor imagery of my holding him with both hands and shaking him." Another instance from the same subject: "I had an impulse to punish X., restraint was immediately followed by a motor and visual imagery of the

act of punishment." Subject C. observes, "The first impulse was to kick X., the restraint was accompanied by motor images of kicking him, followed by the image of his being hurt in the face." E. states "I felt as if I would like to shake him and imagined myself doing it." G. developed a case of anger from a series of irritating stimuli. Describing his anger, he says, "I felt like I wanted to bite or hit something." B. reports a case when he had been humiliated by some boys along the street. The tendency to anger at the time was controlled, but as he passed on, the emotion arose with greater intensity. "I imagined myself beating one of the boys, I gave him several good punches; he had no show at all. I came out victor and was enjoying it all." One of the many sorts of mental reactions that H. reports to a case of anger that extended over three quarters of an hour, is, "I imagined myself charging at him and his looking frightened at my behavior."

*Substitution of Irascible Play.* The imagined fight and victory take the place of tendencies which would have a more objective expression. Another sort of substitution of the initially restrained emotional reaction, is first to lessen the restraint by inhibition and react in some less crude manner in a slightly disguised form, which gives a feeling of satisfaction in inner victory and at the same time lacks the objective hostility. A. felt humiliated because of X.'s remark in the presence of others. "Resenting his familiarity, I went out of my way to pass him; I grabbed his arm and gave it a tremendous grip, at the same time I smiled playfully. I really aimed to hurt him and was fully aware that I wished to hurt him worse than I did. What I did was merely a substitution, but now that the act was over, I felt fully satisfied and pleased with what I had done." The playful attack is a rather common sort of reaction to resentment with observers A., C. and D. D. observes, "I was angry at X. and was trying to control myself; suddenly I

grabbed him and punched him several times in the ribs, at the same time I smiled. I did not want him or the others to know I was angry. I enjoyed pummelling him, as I felt I had demonstrated to him that I could handle him." In such observations the subject's awareness that what he does in a playful fashion is but a substitution of what he would like to do in another manner, is significant. This sort of awareness seems to be ignored in the every-day experience of our emotional life. Attention is directed to the reaction; we involuntarily seek a place of lessened resistance, but the act of introspection allows the subject to be more clearly aware of the inhibited reaction and the substituted expression which follows.

*Substitution of Imaginary Invective and Cutting Remarks.* The vocal expression of anger is one of primary significance. Swearing, grumbling, invective, quarrelling, interjectional obloquy, etc., are very common signs of anger. The results would very strongly suggest that anger rarely, if ever, occurs without its vocal expression in some manner, if not by direct vocalization either by inner speech or voco-motor imagery. Introspection of slight emotions or anger lasting momentarily, show as their most marked sensation, one of tightening of the throat muscles. Defamatory language or mild swearing is common with all the subjects studied while in the privacy of their own rooms when the restraint is off. The expression of the vocal cords is one of the most successful vents. B. was instructed to abandon himself to vigorous invective and interjectional obloquy when the emotion first began and note the result. He followed these instructions on three occasions when the emotion from the beginning was unpleasant, developing from a fore-period of irritation. With this sort of voluntary vigorous vocal expression, the anger soon passed into rather pleasurable excitement.

The reaction to anger in its initial stage may be a vocal tendency to express one's anger, referring the emotion directly to some person or to an object. When the restraint is on, either from motives of decency or the absence of the offender, the thinking of cutting remarks may be substituted for the actual verbal attack. The subject is aware that what he says to himself he would like to say to the offender. Methods of procedure are elaborately planned for a future verbal attack, just what he expects to say and wants to say, how he will say it, the inflection of the voice, the emphasis of words and dramatic attitude. He may imagine the effect of the attack on his opponent, the latter may talk back. The imagined verbal combat is usually a one-sided affair and ends in victory for the subject. Drastic remarks and the most cutting sarcasms are planned at times by the subjects studied. However there are wide individual differences which cannot be referred entirely to the difference in intensity of the emotional life. Habit apparently plays an important role. D. felt that he had been imposed upon by X. and Y. After the humiliating incident had passed, D. suddenly found himself in the midst of an anger reaction. "I found myself having a verbal combat with them. I imagined I was telling X., 'I should think it costs but little to act like a gentleman, but I presume this is an illustration of your piggishness.' Then I imagined Y. beginning to talk. Just what he was saying was not clear, but I was aware that he was helping X. I interrupted by telling him, 'I understand you are from ——— and of course I can't expect anything better of you.' They began to talk back several times, but I got the better of them and felt pleased about it."

The cutting remarks are at times crude and abusive. The subject may swear at the offender. Persons who do not swear in actual life frequently do in imagination. In such imaginative verbal attacks the offender's bad qualities are displayed before him, at other times the same subject may

resort to imagery, sarcasm, witticism or joking of a hostile nature. The motivation seems to be to imagine remarks that would humiliate the offender. The visual imagery of the astonished humble opponent is usual in these imaginary attacks. Crude and abusive remarks may at times seem entirely appropriate; at others, sarcasm and irascible joking seem more adequate. Sarcasm usually develops rather slowly with a period of restraint preceding it, unless it is ready made for the occasion. When the fitting sarcastic remark is found, it is usually accompanied by pleasantness in some degree. F. observes, "I could get no imaginative remark that would suit me at first, but after the emotion appeared several times in succession I suddenly discovered one and found myself saying it over and over again. It rather pleased me, I practiced it to get the right inflection and emphasis that I desired."

The imaginative cutting remark may be in the second person as if addressed directly to the offender, especially when the emotion is intense. It may be in the third person about the offender, his unfavorable qualities are recalled with no plan or intention of repeating his remarks to him. The contemplation of his unworthiness is accompanied by an agreeable feeling. B. became righteously indignant at X. because of an incident of ungentlemanly conduct toward a friend. He observes, "A moment later (that is after the first instance of anger) I imagined myself in my alcove in the Library, and imagined some other person, I did not know, who came in and said to me, 'What do you think of X?' I replied with a good deal of pleasurable indignation, 'I think he is a damned ass.' Three-quarters of an hour later as I was walking along the street, the emotion arose again, and I imagined some one asking the same question, I replied the same as before with a like feeling of pleasure. I really wanted some one to ask me what I thought of X. The subject may be aware that what he says

to and about the opponent is a little unfair, but at the time that the emotion is progressing, he ignores it and wants to believe ill of the offender.

The results of this study abundantly show that a make-believe attitude plays an important role in the anger consciousness, in both the development of the anger and the reactive consciousness. It is believed momentarily, when the anger is most intense, that the offender is really a bad man. Pausing for introspection in the midst of such emotional reaction, it is frequently reported, "I knew very well I would say nothing of the sort and that X. was not so bad as I believed him." While the emotion is most intense, ill reports about the offender which were previously ignored are now believed and assumed as true, and satisfaction is derived by degrading the best qualities of the offender, by believing stories of ill repute, by suspecting or imagining evil of him. The degree in which this tendency is present, depends partly on the intensity of the emotion, and evidently in part on the individual habits of reaction to anger. The chronic inrascible gossip is evidently a characteristic type of person who has specialized in this mode of reaction to anger.

*Substitutions by Witticism and Irony.* Witticism, sarcasm, irony, teasing and joking make up a large class of vocal and imaginal reactions which may take the place of the initially restrained emotional tendency. The crude remarks, transformed into wit or fitting sarcasm, overcome the consciousness restraint that was initially present in the emotion and lessen resistance. It is accompanied by a pleasant feeling and may be keenly delightful. A thrust in a half serious tone accompanied by a smile, the jest and hostile joke follow a state of mind characterized by restraint. In the observations of the subjects studied there is evidence supporting Freud's (8) theory of wit. What he calls "tendency wit"; that is, wit with a definite aim has two divisions,

the hostile joke and the obscene joke. The first is a reaction to irascible anger and the latter to the sexual emotions. The introspection of the reactive stage of anger consciousness shows the Freudian mechanism for "tendency wit." The following case will illustrate a crude kind of wit. H. whose husband had stayed out late at night became angry following a period of worry. Fluctuating intensities of anger and periods of worry lasted over an hour. After a number of reactions such as planning verbal attacks; recalling his thoughtless behavior at other times; crying, assuming an attitude of self-pity; devising some means of making him sorry; at times trying to assume the attitude that it was no use to be angry; taking observations of the emotion at a number of places, motivated by a wish that her husband would see the results and feel sorry; imagining herself going to him and talking rather abusively. Finally she found a remark that gave the keenest pleasure of all. "I imagined myself saying, 'Petty dear, you have been out pretty late tonight.'" This was a condensed veiled statement expressing about all she would like to say. "Petty" is a character portrayed in a current illustrated newspaper as being mean to his wife and flaring up angrily at every little incident. The character of "Petty" was fully understood by her husband. The crude hostile reaction was followed by a rather condensed acute remark; it was reported as pleasant, "because it seemed so fitting."

C. in a discussion with X. became angry and gives the following observation, "I noted I was getting angry and wanted to say something hostile, but instead I turned away suddenly and laughed, saying in a joking, half-serious manner, 'Oh you old bottle head, you don't know anything.' Although I laughed, I really meant it. That gave complete satisfaction. He laughed too." Let us illustrate further. A., with four others, was walking along the street, coming from a clinic at the hospital, where a case of flight of ideas



had just been observed. X., one of the party, was talking in a manner that seemed to A. a little superfluous. He resented his attitude, and turning he said to X. in a joking manner, "What did you say? The malady must be catching," (referring to the case observed). X. retorted, "I never have any fixed ideas." A. replied, "No, they do fly away pretty fast." A. observed, "I felt pleased and victorious with my remark, my resentment was entirely gone and I entered into conversation with X. in a friendly manner."

Witticism is one of the more refined modes of substitution for the more directly hostile attack. Sarcasm is cruder. Its mechanism depends for the most part upon the inflection and tone of voice in speaking. The words themselves in sarcasm are innocent enough, but the mode of expression and the meaning involved are the sources of hostility. The following statement represent sarcastic remarks. A.—"I think I will come around to your Club," emphasis on the word "your." A.—again, "You surely must be right," emphasis on "surely." J.—"You are not the boss, then?"—emphasis on "not," with a little sneer and an accompanying laugh. Sarcasm is a rather cheap and easy reaction to anger. It is consequently more easily attained than wit. The period of conscious restraint preceding sarcasm is usually less, unless the witticism is already made for the occasion. Its feeling effect is also not so pleasant as of wit. At times sarcasm may be combined with rather crude wit, but wit of a more refined type will exclude sarcasm. The following is a combination of this kind. C., having become angry at X. for his "bragging attitude," says, "I was conscious of the tendency to say something hostile, but could think of nothing appropriate. In the course of his remarks X. finally said, 'I never read anything for an experiment as I fear it might bias my results.' I suddenly found a remark that seemed entirely fitting at the time and at once the restraint was off. I said a little sarcastically, 'No, you

never want to read anything, it might hurt your intellect.' As soon as the statement was made I saw I had gone too far and felt a little cheap. I at once noted that he did not take my remark seriously, and felt relieved. My former resentment had entirely disappeared."

*Substitution by Disguise.* There are many devices less refined than wit which are commonly resorted to in slightly disguising the hostile attack. The offender may be attacked indirectly and impersonally. The following case will illustrate. F. became angry at a merchant because, when he went to pay for an article, the price was marked more than he had previously agreed to pay. Feeling resentful, he said, "I suppose the bill is all right, the clerk said it would be less, but people in this town don't know what they are talking about anyway." F. observes, "What I really meant was that you don't know what you are talking about." To avoid making the direct attack, the indefinite pronoun is substituted at times for the definite. The use of "some one" or "somebody" instead of "you," in talking to the offender blunts the remark. The device is rather cheap affording little pleasure and has but a short fore-period of restraint. It is carried to an extreme when the subject pretends he does not know the perpetrator of the offense and in fact may assume it is some one else, so that he may speak his mind directly to the offender. I. observes, "I was angry, and talked to her about the affair as if I did not know that she did it. I wouldn't have had her to know that I knew for anything. I told her what I thought of a person who had acted in that way and noted that she looked cheap. That pleased me." Some gossip and vituperate against their enemies and derive a moiety of ill-gotten pleasure if a sympathetic hearer is found. One subject states, "I went to tell X., hoping he would be angry too, and felt just a little disappointed when he was not." Hints and insinuations often become devices to avoid a too hostile direct attack.

*Imaginary Exaltation of Self.* Another rather important reaction of the attributive type is an idealistic one. Imagination and ideational processes are active. Lowered self-feeling has been accomplished in the subject usually by a number of repeated offenses by some one that the subject really respects. The offender is frequently not imagined as degraded, but he is left as he is, and the subject proceeds to imagine,—it may be to fancy or day-dreams that he is the offender's superior. As the reaction to moments of humiliation, he may later plan to surpass him. An attitude of make-believe may be momentarily assumed that he is already the offender's superior. Fantastic schemes of a successful career may appear in which he imagines some distant future, in which he has gained renown and the offender is glad to recall that he knew him in other days. Sometimes he is imagined as seeking his friendship or advice, or favor, and is refused with dignity. At the next moment he may be graciously bestowing favors upon the offender. Such imaginative processes are observed to afford pleasure to the subject at the time and may lead to a new level of self-confidence which has important influences on later behavior. Usually idealistic reactions of this character appear in consciousness after more directly hostile reactions have failed to satisfy the subject. A few cases will illustrate. A., recalling an incident of the day before which humiliated him, became angry. At first he began saying in voco-motor fashion as if talking directly to X., "You are a conceited fellow. You are hard to get along with. I will beat you. You are too nervous to get very far." "I imagined myself treating him in a superior, dignified manner." A. then laid plans how he would work, stick to one thing, make himself a recognized authority, and how he would have little to do with X. He imagined X. coming to him for favors when he had attained the success he had planned, and himself taking a rather indifferent attitude toward his requests. A.

observes that his entire reverie was pleasant, although the anger was unpleasant in the beginning. C. reports a case of anger at X. who had taken a rather critical attitude toward a problem which he was studying. He observes, "At first there was a slight humiliated feeling. This was displaced by resentment. I imagined myself standing before X. and giving him two good retorts which I considered would have their ill effects on him. At this point the theme changed, 'I will leave you alone and have nothing to do with you,' I felt as if this behavior would somehow punish him, and that pleased me a little." But as a third and final reaction C. observes the following. "I planned to do my work so well that X. would feel sorry for what he had said, I imagined X. complimenting me after it was finished." The early stage of the emotion above was reported as unpleasant, the final ending in which C. imagines X. complimenting him on his success was a point of marked pleasure. Subject E. who had felt humiliated by X. whom he considered had underestimated him, observed as a final reaction, "I will show him in the next ten years, I am young and can work, and he will see." Then followed a number of plans for the future. One subject reacts for a moment at times to resentment by day dreams in which he imagines himself a man of wealth and deals out favors to all except his enemy. He even uses his wealth and influence against him. The feeling is rather pleasant in tone till the moment he comes back to a sense of reality. The transition decreases the pleasantness rather suddenly.

*Attitudinal Reactions.* Attitudinal reactions of a hostile nature are an important part of the anger consciousness. What may be called "resolutional attitudes" frequently occur as one of the final mental reactions in the diminution of the emotion. The resolutional attitude to do something in the future at a more convenient time when the effects will be greater, becomes a convenient substitute for conscious

tendencies that require present restraint. The subject definitely settles on a course of action which cannot be carried out at once. The feeling tone of such conscious attitudes is pleasant. It is not unusual to have a settled resolution and come to a definite conclusion in the initial reactive stage of the emotion. Unless the attitude is ready made for the occasion, it appears as one of the final resorts. A characteristic of "nowness" belongs to anger. An attitude that portends to future behavior is secondary, appearing after the possibilities of present reactions are exhausted. Much of the initial restraint in inhibitions is preparatory to the attainment of a settled conclusion; in some cases initial reaction behaves in a trial and error fashion. The results of a number of hostile impulses are imagined and are followed to their end until finally one is selected that seems most fitting. The conclusion reached may be temporary. Although it may be abandoned on the reappearance of the emotion, there is a temporary satisfaction in having attained a conclusive attitude even momentarily. The following case from C. will illustrate. C. became angry on being told of X.'s behavior. He first recalled a number of previous similar instances; second, he transferred the anger momentarily to another person who told him of the offense; third, he imagined himself cutting off all business relations with X. and as a fourth reaction he observes, "I took on a pugnacious attitude and concluded to fight it out according to the rules of the game, and planned what I would do and say to make him come my way." The attitude of waiting for further developments, biding one's time, being cautious, is a frequent substitute for rising tendencies demanding present action. Subject E. observes, "I finally came to the conclusion not to lie in wait for the opportunity to get back at the offender, but to be on guard against a future attack, but even after the conclusion was formed it was not at once carried out though it pleased me. I still found myself plan-

ning what I would say if the thing should be repeated." A. angry at X. and Y., finally came to the following hostile conclusive attitude, "They had better be doing nothing like that, I will watch them, and when I get a chance they will hear from me. I will be cautious and sure first, with which final conclusion my anger disappeared."

### THE CONTRARY REACTION

The second general type of reaction to anger is what we have called contrary reaction. The subject suddenly reacts contrary to the emotive tendency of the emotion. He behaves contrary to what he actually wishes at the time. Religion and morals have idealized this type of behavior in its extreme form. "Turn the other cheek," "Love your enemy," "Do good to those that hate you," are exhortations of more than one religion. As compared with the type described above, relatively a small percent of the mental reactions under the influence of anger, as shown by the observations of all the subjects studied, are classed as the contrary reactive type, eighteen percent as compared with seventy one percent.

The contrary reaction is not so rich in versatile behavior as the one just described, in fact it is limited to a few set reactions. The subject suddenly reacts to a state of mind contrary to anger. It may take strong effort to make the change and the attitude is not heartily entered into at first and does not usually occur when the emotion is most intense, but after it is partly diminished, consequently it is usually delayed till a later stage of the emotion. If it appears in the initial stage it precludes a complete development of the emotion. Subject G. has apparently acquired the habit of championing, in the initial stage of the emotion, the offender's point of view and forestalling the development of anger against persons. His anger is attained most fully against objects and situations. He considers this due

to his training in early childhood. E. has developed a partial habit of assuming an attitude of forgiveness toward the offender. C. and A. when in a quandary and unable to find other adequate means of expression, suddenly revert to the contrary reaction. It becomes a habitual device toward close and intimate friends or toward persons with whom it is necessary to get along. After the anger has gone so far, the subject suddenly assumes a friendly attitude as if there were no emotion.

There are various conditions under which this sort of mental reaction to anger occurs. It is a frequent device in a social situation when there is rising anger and it becomes necessary to adopt a sudden and quick control. It is forced upon the subject to meet a sudden crisis. He may at once assume an over-friendly or over-polite behavior, when in reality he would like to behave in a hostile manner. A little over-solicitude for the offender may be conspicuously displayed. A few cases will illustrate. B. was met on the stairs by his landlady, who requested him not to write on his machine after ten o'clock, also to put on his slippers on coming home late before ascending the stairs. He observes, "Before she had finished I felt uncomfortable and was vaguely aware of the inconvenience that these limitations would cause me. I recalled that she had said that I could use the typewriter all I wished when I took the room; I found myself becoming angry, but at once I took the attitude of excusing her. I noted that she looked tired while she was talking, and thought perhaps I had kept her awake. I then said with an extra pleasant tone, 'That is all right, I am very glad you speak of it, I wish you had told me before.' The pleasantness was assumed, I did not feel pleasant as I spoke, I was still mildly angry. Five minutes later I recalled what she had said and began to get angry again, but at once imaged her tired appearance and excused her as before." A.'s observation illustrates further. A. was humiliated and angry at X.'s statement. "I wanted to say some-

thing cutting, several hostile remarks appeared which were inhibited one after the other. I felt extremely confused and unpleasant but I suddenly began to agree with X. I told him in an over-polite manner he was quite right and that I was glad he had mentioned it. In reality I did not agree with him nor was I glad." A. states that on leaving the presence of X. the emotion reappeared many times in the course of the next half day and in no case did he find any excuse for X.'s behavior but blamed him severely. When the contrary reaction is resorted to as a device to gain quick control, it is reported as unpleasant. The emotion reappears again and is usually followed by unpleasant feelings, but when it is not forced upon the subject and is entered into spontaneously with zest, as a means of finding some sort of satisfaction for the emotional restraint, it is accompanied by pleasant feelings. Subject A. sometimes takes keen delight in assuming a dignified attitude toward an offender and treating him rather friendly as if he were far above getting angry. He states, "I always feel I am victor, that I am master of the situation, and it is pleasing when I do this." It may be said that whenever the attributive reaction is satisfactory, the contrary reaction is not resorted to. The latter type occurs for the most part when the subject is mentally obstructed and there seems nothing else to be done but to ally himself heartily with the opponent for the moment until the storm of his mental stress is passed. Subject J. in a situation, when it would be rude to display his anger, observes, "Each time I found myself becoming angry at X.'s remarks, I would take a negative attitude toward the rising impulse and laugh quite good naturedly at his statement. The laugh was not forced, I entered into it heartily. Subject C. finds himself at times suddenly laughing at the most commonplace remarks when mildly angry at an offence. It is a common device of subject B. to burst out laughing at his behavior when mildly angry, as if he were merely a spectator of his emotion and not a partaker



of it. "I recalled the offensive behavior of X. which had happened two hours before. I found myself in an emotion of slight anger, followed by an explosive, 'Damn that X.' There was present much motor tension in arms and face muscles, then noting my angry demonstrations I laughed outright at myself and felt pleased. The anger disappeared entirely with the act. It is frequently reported that a sudden pause in the midst of unpleasant anger to introspect, is pleasant when attention is directed to the behavior, but when attention passes to the situation exciting the emotion, anger tends to be reinstated again. Observations like the following are reported: "Pausing to observe my emotion, my whole behavior seemed so ludicrous that I had to laugh." The subject may suddenly assume his opponent's point of view, find a number of probable excuses for his behavior and at times actually imagine himself as champion for his enemy against himself. He does this heartily at times when there is no outside compulsion and derives a feeling of pleasure in the act. The contrary reaction may be hostilely resorted to in some instances. The subject is aware that his aim is to humiliate his opponent by making him ashamed and sorry; but it is usually reported that, after he has assumed the over-friendly attitude with its hostile intent, there is a self-satisfaction in the sudden breaking up of the unpleasant conscious restraint. Subject D. observes, "I knew I was doing the favor to make him feel ashamed; watching him, I saw he was not ashamed in the least but I continued my friendliness and felt pleased in doing it. There was no regret when I saw that he did not take the matter as I had at first wished." In the contrary reaction, a joke or witticism may be employed, but it has an entirely different aim from the joke discussed in attributive reaction. It lacks hostility. Its aim is friendliness, the theme is contrary to the situation giving rise to anger and serves to distract the attention from the emotion.

## THE INDIFFERENT REACTION

The third class of mental reactions to anger is what has been called the indifferent type. It is attitudinal in character. The subject assumes for the time an indifferent attitude toward the situation and person exciting the emotion. Eleven percent of the reactions of all the subjects studied may be classified under this type. It occurs as one of the last resorts when there is nothing else to be done. If it appears in the initial stage of anger, the emotion does not fully develop. It is not reported as actually pleasant but rather passively relieving for the time. Subject B. had received a piece of adverse information in a letter. He observes, "At first, I was angry and at once threw the letter down on the table in an attitude of not caring anything about it. I felt that nothing could be done. I had really wanted the information badly. I threw up my hands and moved my body suddenly with a 'don't care' feeling." B. reports that he recalled the situation several times later, but the anger did not appear again. The same subject recalling the offensive behavior of X. and Y. became angry, and observes, "I found myself saying aloud, 'Oh confound them, I don't care anything about them,' and at once started to attend to something else. My saying I did not care, made me feel as if I did not care; in fact now I really did not care." The sudden assuming of an apathetic attitude toward the developing anger is a frequent device of subject B. A. after a rather prolonged emotional reaction in which he imagined cutting remarks and planned how he would retaliate, suddenly changed his attitude, saying, "What is the use anyway, it is just X., I don't care anything about him, I will let him go his way." C. when angry at times reenforces an assumed attitude of indifference by saying to himself, "Here, you must not be bothered about such things, be a good sport and play the game." One at times assumes an attitude of accepting the situation as it is, and dropping the matter.

## **DISAPPEARANCE OF ANGER**



## CHAPTER THREE

### DISAPPEARANCE OF ANGER

The anger consciousness is one of variability and change. The emotion may disappear rather suddenly with the appearance of a new emotion or it may disappear gradually. There are usually fluctuating nodes of increasing and diminishing intensity accompanying the changing direction of attention, ideational behavior, and motor and mental activity in general. Attention again to the situation exciting anger tends to increase its intensity, if the situation from which it arises remains unchanged.

Any behavior, whether mental or motor, which changes the total mental situation from which anger originates, tends to modify the emotion itself. This total mental situation cannot remain unchanged long. The affective processes which have been aroused usually serve to redirect attention again and again to the situation exciting anger. The aim of angry behavior may be said to be three fold, referring to the total mental situation from which the three main types of anger arise; (1) to enhance self-feeling which has been lowered; (2) to get rid of the opposing obstacle to the continuity of associative processes; (3) to recover from one's wounded sense of justice.

The total feeling situation becomes modified in the course of the disappearance or diminution of the emotion. Anger which springs from a fore-period of irritable feelings disappears by a different set of ideas than from anger arising from a fore-period of negative self-feeling.

Pleasantness is an important condition in the diminution of anger. There are but few instances that show no pleasantness in some degree somewhere in the reactive stage of the emotion. The pleasantness ranges from momentary mild relief to active delight. Periods of restraint during anger are periods of unpleasantness. Periods of lessened restraint

are accompanied by relief or pleasantness. Two periods in the development of anger are most unpleasant. (1) The entire cumulative development of anger is unpleasant. It is a frequent observation in the immediate fore-period, "I wanted to get angry at somebody or something, I felt I would feel better if I did." (2) Often during the active stage of anger, there are found one or more periods of unpleasant inhibition and restraint. This is often a stage of experiment in imagination, foreseeing unpleasant results of too drastic behavior, inhibiting, choosing and selecting in the effort to discover some reaction which may successfully meet the emotional crisis of the moment. There are cases of anger with all the persons studied, which do not get beyond this inhibitive unpleasant stage. Anger may be almost entirely unpleasant or mostly pleasant. Some persons have a greater mental versatility than others in finding a successful expression to anger, consequently they have relatively a greater proportion of pleasantness. Under the influence of fatigue, the ability for successful expression is lessened and there is a correspondingly increased tendency to emotive excitation and decreased emotional control.

When a fully successful reaction is not found, anger dies hard. It may become necessary to attend to something else voluntarily for self protection. Anger disappearing unsuccessfully tends to recur again and again, it may be. Its reappearance frequently allows the unpleasant initial stage to be shortened or dropped entirely leaving a mildly pleasant experience.

Anger disappears suddenly and pleasantly if the subject can gain the subjective end of the emotion. Subject J. observes in the case of an anger arising from a feeling of irritation, "At this moment (the moment of successful expression) I felt pleased, my anger now disappeared leaving a pleasant after-effect." A case from A. will illustrate further. A. got on the wrong street car. The conductor re-

refused to allow him to get off at his corner of the street. He observes he was angry, not because he was hindered from getting off, but because of the insulting attitude and remark of the conductor, who said in a hostile manner, "Why did you not pay attention to what I said, this car does not stop, you will have to go on." A. then became angry and demanded in rather severe language to have the car stopped. At this point the conductor changed his attitude and stopped with no further words. A. observes, "As I stepped off I had a distinct feeling of pleasantness. I felt I had been victorious. I was no longer angry. Sensations were still present in chest, arm and leg muscles but these were now pleasant. Upon recalling the incident, I had not the least resentment against the conductor. On the whole, I now felt glad the incident had occurred."

Pleasantness may appear on the observation of the offender's failure or humiliation. C. becoming angry at X., who was manipulating some laboratory apparatus, observes, "I let him proceed rather hoping he would spoil his results. When I noted he was failing and observed his discomposure, I felt pleased. That satisfied my anger against him at once."

The imaginal humiliation and trouble coming to the offender, also increases the feeling of pleasantness and diminishes for the moment the anger. The imaginative verbal or physical attacks usually allow a subject to come out victorious. What D. observes is typical. "I imagined he was stunned by my attack, and the result pleased me; that satisfied my anger."

If the offender acts friendly and accommodating, that affords a relief to the offended person and is a condition for the rapid disappearance of anger. F. observes, "He behaved so friendly that I thanked him and felt relieved. My anger was now almost gone." C. became angry at X. for what he had interpreted as a hostile attitude. Five minutes

later X. sat down by him. C. observes, "He acted sociable and I felt relieved, my anger was entirely gone, in fact I now felt quite friendly toward him." It is also commonly reported that when the offender becomes submissive, it affords a relief to the subject and usually kills the emotion. C. observes, "After he had submitted, my anger had disappeared and I now felt a little repentant at what I had done." The same subject sometimes observes that he imagines the absent offender at whom he is angry, smiling and acting friendly in the usual way, and the imagined friendly attitude is a relief to the emotion.

Anger which develops from a fore-period of negative self-feeling, disappears when the subject is able to acquire a positive feeling attitude toward the offender. It may be accomplished subjectively. The subject tends to lower his opinion of his opponent, he enjoys an idle gossip, it may be, at his expense, recalls ill reports he had previously heard but ignored, and in fact may employ a number of devices of imagination and make-believe. He at times tends to magnify the offender's unworthiness, and may come to the conclusion that he is scarcely worth troubling about. Mental behavior of this sort is commonly reported to enhance self-feeling. On the other hand the subject may accomplish the same end by magnifying his own personal feelings directly by dwelling on his own good qualities and worth in comparison with that of the offender. Such comparisons are almost always to the disadvantage of the opponent. Subject C., in a controversy with X., became angry and walked away when the emotion was still intense. "I now began to recall how insignificant he is and how important I am. He is narrow, pedantic and incapable of seeing a large point of view. I am not so narrow. All was slightly pleasant and was accompanied by a decreased intensity of my emotion. I now met X. and joked with him; my anger was entirely gone." The feeling of superiority kills anger of the type which



arises from a fore-period of humiliation. It has already been indicated that when a positive feeling is maintained in receiving an injury, anger does not arise. The would-be offender if he is regarded as unworthy or unaccountable for his act, does not usually excite anger. The same person, however, may stimulate anger by a process of increased irritable feelings. Subject A. beginning to get angry at X., (a person he holds in low esteem) observes the following association. "Oh, it is just X., no use in my getting angry at a fellow like that, he is not responsible anyway, and I would be foolish to be bothered by him. I had started to ridicule him but now my emotion was gone."

A contemplated victory gives pleasure and diminishes anger even before the victory is attained. The emotion disappears on assuming a positive determined mental attitude, it may pass off in vehement resolution as to further behavior. In fact, one may begin and finish his fight through the medium of ideas and have no enthusiasm left for the actual encounter.

With a third condition for the disappearance of anger, pleasantness is present but usually in the form of mild relief. Positive self-feeling is not so clearly marked in consciousness. The subject looks at the offender's point of view, finds excuses for his behavior, elevates his opinion it may be of him. A new idea is added to the mental situation exciting anger which entirely alters the feeling content, and consequently anger disappears. Subject I, observes, "When I finally concluded that X. meant well, my anger was almost gone." G. resentful at X. because he did not speak to him states, "I recalled suddenly that he is cross-eyed and probably did not see me. I said to myself, 'He is a good fellow and is friendly toward me all right.' My emotion was now gone." B. mildly angry at X. and Y. for intruding upon him, observes the following soliloquy. "No, they have more right here than I have. This room is for people

to converse in rather than for one man to occupy alone. My anger was now decreased but not entirely gone. "Even a tentative excuse for the offender's behavior allays anger temporarily. The emotion may last for several days, appearing at intervals, and with a sudden introduction of a new idea providing an adequate excuse for the offence, the condition exciting the emotion will be completely changed.

Anger diminishes and disappears more frequently in the change of attention than by any other one condition. A pause in the midst of anger to attend to one's mental behavior affords a diminution of the affective process. It is often reported as amusing when a subject suddenly ceases attending to the situation exciting the emotion and observes his mental behavior; laughter at this point is often reported. Close attention to the act of managing the irritating or humiliating incident, allows a rather gradual diminution of anger. Anger does not arise when the subject is rigidly attending to the damage done, but only when he begins to feel the damage as humiliating, irritating or as contrary to justice. One subject hums or sings when angry. A joke or witticism will break the crust of conscious tension allowing the attention to be distracted elsewhere.

The subject may suddenly assume an apathetic attitude toward the whole incident and kill the emotion at least temporarily. The mental situation from which anger arises, is one contrary to indifference, in fact, the lack of indifference is one of the essential characteristics of the fore-condition of anger, and consequently when this attitude is present, anger is cut off.

A resolution or a settled judgment has a relieving effect. Whenever the subject comes to a definite conclusion whether it refers to the emotional situation or a contemplated mode of behavior toward the offender, there is reported a sudden drop in the intensity of the emotion, even though the attitude is but a tentative and temporary one. The reason for this

is evidently that such a mental attitude is contrary to the immediate mental situation from which anger arises. Anger springs from the fact that there is lacking a definite mental attitude as to what should be done during the reactive stage of the emotion. One of the most efficient controls is to have a well planned reaction to meet the emotional crisis before it appears; when the injury occurs, if there is a preparedness as to what should be done, even though the response is but a subjective one purely attitudinal in its nature, anger fails to develop to its intense stage.

### SUCCESSFUL DISAPPEARANCE

The success with which the emotion of anger disappears is a matter of wide individual difference with the persons studied. With some the reporting of the emotion from the introspection notes tended to reinstate the emotion. One subject was frequently disturbed by the reappearance of the emotion during the report. In one instance he refused to report to the writer for three days afterward. He reports he could not recall the situation without the reappearance of the anger in its unpleasant form. Other persons could rarely reinstate an emotion in any unpleasant form overnight. At times the anger was reinstated in its pleasant aspect. Sometimes a feeling of exaltation was displayed. The subject showed he enjoyed recalling the emotion. Imagined and carefully devised schemes of retaliation were often rehearsed with pleasure. Again the observation would be a feeling of indifference, as something past and finished. Often the statement was given, "The whole thing seems ludicrous and amusing to me now."

It is rather pleasing to recall the situation exciting anger when the original emotion is short-circuited, as it were, allowing a pleasurable, gossipy vituperation against the offender without the initially unpleasant stage of anger. In fact the subject may re-experience a little of the unpleasant

humiliation through imaginative stimulus, if the pleasantly reactive stage is successful enough to compensate. If the subject is aware he has a sympathetic hearer, it is far easier to pass over the initially unpleasant stage of the reinstated anger and enjoy a hostile, gossipy reaction. The writer in the course of the study became so intimately acquainted with the private emotional life of the subjects studied and had been a sympathetic listener of the emotional experiences so long, that after the period of observation had ended, he would find himself the recipient of emotional confidences which the subjects took pleasure in relating to him. Says one on reporting, "I really was not interested so much in the scientific side of this emotion as I was to tell you of my resentment, and as I look over it now, I am really aware that I assumed a scientific interest as a means of gaining full sympathy and giving me full freedom to speak everything in mind." Another subject says, "I went to tell X. for I believed he would get angry too and I hoped that he would." The same situation does not usually allow anger to continue to reappear in its unpleasant form, for repeated appearance tends to eliminate the active unpleasant stage.

An emotion of anger which has been unsuccessfully expressed may continue to reappear in consciousness again and again. Crowded out, it will suddenly return at times by chance associations. It may become so insistent that it is an unpleasant distraction from business affairs and the subject must find some sort of reaction to satisfy it. F. observes, "I could not do my work. Just as I would get started, the idea would reappear suddenly and I would find myself angry, tending to think cutting remarks and planning what I should do. Each time I tried to escape from it, it would come back again. Finally I determined deliberately to get rid of it. I recalled all the good qualities of X., what favors he had bestowed upon me and in fact felt quite friendly toward him. Before I had finished, the

anger had disappeared and did not return. Later, as I recalled the situation incidentally, I felt indifferent toward it." Such deliberate behavior is unusual. The reaction to an emotion is mostly involuntary. In many instances, when emotion is prolonged, it is much like a trial and error process, one reaction after another is tried out in imagination until a rather successful one is found. This re-appearance of an emotion when it has been repressed gives opportunity for a new trial and mode of attack.

There are two general conditions under which anger disappears most successfully. First, if the mental situation from which anger arises is changed directly by the addition of a new idea that gives an entirely new meaning content to the incident so that it will no longer be humiliating or irritating, as when the subject can thoroughly come to believe that the motives of the opponent's offense were not hostile but friendly, anger disappears rather successfully with no unpleasant after effects; the anger is cut off directly at its source. To illustrate, C.'s anger at X. which had been a source of unpleasant disturbance for two days, completely disappeared when he was finally informed that what X. did was not meant as personal. The subject at times finds himself trying to assume a little of the attitude of make-believe. He really wants to believe the offender meant well. A second successful condition for the removal of anger is when the subject reacts so that he feels he has fully mastered his opponent. He has given full restitution for the offense and feels a pleasurable satisfaction in the results. Feeling is an essential factor, whatever the method employed. If a feeling of complete victorious satisfaction is accomplished in connection with the disappearance of anger it is usually successful. The circumstances are rare in which the direct verbal or physical attack would be fully satisfactory. A substitution in the form of hostile wit, teasing, irony, or it may be a favor bestowed with a hostile intent, may accomplish

the same result as far as feelings are concerned and completely satisfy the anger. The imagined victory, or a make-believe one, may serve the same purpose.

The most unsuccessful condition for the disappearance of anger is one commonly used in emergencies—that of changing the attention and avoiding the offensive idea. Intense anger usually returns when diminished in this manner. The attitude of indifference and over-politeness usually serves only as a temporary device of removal for the purpose of expeditious control. Mere repression is not always most successful.

## **CONSCIOUS AFTER-EFFECTS**





## CHAPTER FOUR

### CONSCIOUS AFTER-EFFECTS

Anger has an important influence upon mental life and behavior long after the emotion itself has disappeared. The functional effect of anger may be disclosed in a period after the emotion proper has disappeared. Other emotions may immediately follow anger, such as pity, regret, sorrow, joy, shame, remorse, love and fear. Feelings and tendencies are left over which the subject is fully aware are directly related to the previous emotion. For purposes of study, the period after the emotion will be divided into two parts; first, that immediately after the emotion has disappeared, and second, the more or less remote period of indefinite time. The reaction while the emotion is present, and the way in which the emotion disappears, are conditions which determine to a large extent what will consciously appear after the emotion has passed away. With the aim of finding out what mental factors follow in the wake of anger, the subjects were instructed to keep account of any sort of consciousness of which they were aware as referring either directly or indirectly to the previous emotion observed.

Pity is frequently associated with anger. Mild anger may merge into pity at the point where attention changes from the situation exciting anger to the effects of angry behavior on the offender. Pity often follows the imaginal humiliation of the person committing the offense. It follows more readily when the emotion is against children, servants, dependents or persons with whom there is close intimacy. A kind of self-pity is sometimes associated with anger. With one subject, a mildly pleasant self-pity would frequently follow anger at an injury. At times there is found a curious mixture of anger and self-pity. H. observes, "At times I would be angry, then at other times I would find myself taking a peculiar pleasure in rehearsing my injuries and feeling

rather pitiful for one who had been mistreated like myself." An observation from C. will illustrate the suddenness of the transition from mild anger to pity. Angry at a clerk for a slight offense, he observes, "As I turned away I said to myself, 'I wish that fellow would lose his place,' but at once I felt a little pity for him and said, 'No, that would be too bad, he has a hard time putting up with all these people.'" Subject A., angry at a child observes, "I found myself tending to punish him, I saw his face, it looked innocent and trusting, that restrained me, I now thought, 'Poor little fellow, he does not know any better,' and I felt a pity for him to think that such a person as myself had the correcting of him."

Shame may follow in the wake of anger. It arises rather suddenly in the disappearing stage of the emotion when attention is directed to the results of the angry behavior just finished. Both shame and pity, following anger, are usually a condition of immunity against the reappearance of the same emotion. After shame appears, a reaction usually follows in the effort to compensate in some fashion. Subject C. observes, "Becoming aware of my act and how it appeared, I now felt ashamed and humiliated at what I had said. In a few minutes I brought it about to offer him a favor and felt pleased when it was accepted. I had really been trying to convince him that I was not angry, and now felt that I was doing it." Subject C. observes, "I noted that they saw I was angry and at once I felt ashamed. I now began to laugh the matter off as if trying to show I was not." At times during mild anger when the emotion is displayed too impulsively and the bounds of caution have been overstepped, exposing one's self to a too easy attack from an opponent, an uncomfortable feeling of chagrin appears. The anger may be displayed in too crude a fashion, consequently an advantage is given to the opponent which was not intended. Anxiety that the opponent may take the hostile

thrust too seriously or fear of the consequence, may suddenly displace anger. Instead of an offending person, the same person now suddenly becomes one exciting anxiety or fear.

A fourth affective condition of the immediate after-period of anger is an active pleasantness. Anger disappears and joy takes its place. The condition, originally exciting anger, is no longer able to reproduce the emotion as the subject has become the victor and the offense is recompensed. The goal of anger from its impulsive and feeling side is to be found in the pleasurable victorious affection in the after-period of the emotion. Any anger possesses possibilities of pleasantness in its after-stage. If an objective victory cannot be had, a subjective one plays the part of a surrogate. The processes of imagination, make-believe and disguise, as previously discussed, become devices directly referring to the aim of pleasurable feelings in the after-period of anger. The motivation is to avoid the unpleasant emotions and feelings in the wake of anger and acquire the feeling of victory. The tendency to humor and jocular behavior after anger is sometimes observed. The subject tends to recall his feelings of success and relive them, self-confidence and positive self-feelings are increased.

The feeling of friendliness toward the offender may follow anger which has been successfully expressed. Spinoza was right when he said, "An act of offense may indirectly give origin to love." It is frequently observed in the after-period of anger, "I felt more friendly toward him after my emotion had disappeared." In fact an unusual friendliness with a desire to bestow favors was often observed. We like a man better after we have been angry at him in a successful manner. The emotional attitude is entirely changed toward an opponent who has been overcome, if he allows the victory. It is the unreasoning person who never becomes aware of his defeat, against whom hate follows anger.

Feelings of unpleasant irritation usually follow anger when social or other conditions prevent adequate expression. These feelings seem to be the medium by which the situation exciting anger is repeatedly recalled. The emotion which appears from the imagined situation usually does not leave such intense unpleasant feelings, as the subject tends to attain in his deliberate moments, to some degree, an inner victory over his opponent, or to find an adequate excuse for his behavior. Either of these reactions may be successful enough to exclude irritable feelings in the after-period. Irritation after controlled anger is the medium for the so-called transfer of the emotion from an offending to an un-offending object, which is so often observed. In the after-period of irritation, it is a rather common observation of the subjects, "I was looking for something or somebody at whom I could get angry." "I felt I wanted to hurt somebody." In fact irritation in the after-period becomes an essentially affective element in a situation from which may arise a new anger of a different type. The first anger may have arisen from a fore-period of humiliation, while the latter is from that of irritation.

There is evidence that the affective state in the after-period of anger has a compensating relation to the emotion that has just passed, not unlike the compensation role played between the anger proper and the feeling fore-stage from which it arises. The reactive stage of anger tends to over-compensate for the unpleasant feelings of irritation and humiliation in the fore-period of anger by either increasing the pleasantness or diminishing unpleasantness. If the reaction is incomplete and has not adequately met the emotional crisis of the moment, irritation may follow with a tendency to continue further the emotion, or if the reaction has gone too far, it is paid for by the appearance in the after-stage of other emotions of social origin, such as fear, shame, pity, etc. The feeling of relief occurs after the ex-

pression has nearly restored consciousness to about the same affective level as before the beginning of the emotion; but with active pleasure, a higher affective level has been attained and the subject feels he was glad to have been angry. There is a heightened effect in the affective state following anger; a sort of over-compensation, which is a little out of proportion to the behavior apart from the anger itself. If the after-period is one of pleasantness, the feeling is increased far more because of what the subject has done during the emotion, for it is evident if the same mental processes and behavior occur without anger, the pleasantness is less. Joy is a good example of the intensification of the emotion in the after-period of anger which is out of proportion to the idea stimulating it. The relation between the fore-period, the anger proper, and the after-period is so intimate in anger that the writer has had it repeatedly impressed upon him in making the present study, that to solve some of the important problems of our emotional life, this relation must be taken into account. The entire gamut of the emotional consciousness for each emotion must be studied from the initial feeling stage to the termination of the conscious content after the emotion has disappeared. The emotions do not appear as separate effective entities, but have an intimate relation which is important in the study of their psychology.

Mild anger may leave the subject in a state of curiosity. A feeling of doubt as to the motivation of the offender may appear, and curiosity follows with an awareness of a tendency for anger to reappear if the occasion should arise. After the emotion has passed, the subject is aware of tendencies or attitudes, referring directly to the mental behavior, which were present during the emotion. An attitude of indifference toward the offender and offending situation follows what has been called the indifferent type of reaction. The emotion of anger may leave the subject in a state

of confidence toward himself, positive self-feelings have been reached as a result of the entire experience. On the other hand, slightly reduced self-feelings may follow if the reaction to anger has been unsuccessful. It may leave the subject in either a heightened or a lowered opinion of the offender. A previously friendly interest in the person committing the offense may be increased or otherwise. A feeling of amusement at one's behavior when recalling it after the emotion has disappeared, is often reported. The subject stands off, as it were, and views his own response to anger as if he were a spectator rather than a partaker of his emotion. What the subject did when angry seems so incongruous with his mental state after the emotion has disappeared, that it strikes him as ludicrous. Laughter and amusement frequently appear in the recall of the emotional situation.

An attitude of caution often follows. After a period of stressed inhibition, in which the evil consequences of a too impulsive behavior have been pre-perceived, there is assumed an attitude of control and at the same time a readiness to respond to a suitable stimulus. Anger may leave in its place an attitude of greater determination to make one's point, or if the emotion has been entirely satisfactory, the subject takes the attitude that the score has been settled. An attitude of belief or conviction as to a future course of action toward a like offense may follow in the period after anger, which is a direct result of the conclusion reached when the emotion was present. Mild anger may have changed the feeling tone but little, but leaves the subject primed and ready to respond more quickly to another offense. The result of anger may be purely a practical attitude as to what should be done in such cases with little marked feeling accompanying it. The subject is left not in a fighting attitude, but in one of preparedness to prevent the offense recurring. It is usually necessary in the after-period to re-

construct or modify the revengeful plans or conclusions which were formed when the emotion was intense. What seemed so justifiable during the emotion proper, after it has disappeared becomes strikingly inopportune. If the emotion has disappeared unsuccessfully and resentful feelings still linger, the subject wishes to execute the plans previously formed; but in the act of doing it, he usually finds difficulties of which he was not aware when the emotion was intense. An instance from A. will illustrate. He had been intensely angry at X. and had planned to tell him his opinion of his conduct. By the time he had opportunity to speak, the emotion had subsided. He observes, "I had at this point a severe struggle with myself. I wanted to tell him what I had planned; I felt I was inconsistent if I did not. On the other hand I was slightly apprehensive, not of X., but of making myself ludicrous. I recognized what I had not before, that I was not fully justified, and partially excused him for what he had done. But the tendency to do what I had planned still persisted, and I felt I would give anything if I could do it." He reports further that although the emotion was now fear, at this point "the tendency to execute the plan, formed during the anger, persisted for about fifteen minutes of intense struggle with myself before it disappeared." Tendencies in the after-period of the emotion, which refer to conclusions or resolutions reached during its active stage, at times, when they appear are passed over lightly and even with amusement.

The effects of anger may extend far beyond the period immediately after the emotion has disappeared. The more remote after-period, after the immediate effects have passed off or been modified, have important results in our mental life. The momentum, acquired during anger by determined emotional outburst, may be a reenforcement to volitional action and may allow old habits to be more quickly broken down and new ones formed. If an error has been repeat-

edly made with increased irritation, till the subject has been thoroughly aroused to anger at himself, the tendency to repeat the error is usually successfully forestalled by an attitude of caution and determination following the emotion. The possible failure may be prevented by mild anger at the imagined humiliating result, which increases volitional action to a point insuring success, and a new momentum is acquired which may have far reaching influences. Slight habitual mistakes, like errors in typewriting or speaking, repeated forgetting of details, and social blunders, are reported as cured by anger.

Mild prolonged anger which has not had a fully satisfactory expression may leave in its wake a fighting attitude which if transferred into work enables the subject to acquire new levels of activity. A record from C. will illustrate. He observes, "I would not allow myself to be dejected, but have planned to fight and dig into it like everything. These emotions are the greatest stimuli I have. I get angry, then I want to get down to work for all I am worth." On the other hand, anger which has been successfully expressed may be followed by a feeling of satisfaction in the result and an attitude of success, which gives momentum for increased volitional action in the future.

There is usually a residuum from intense anger which may appear long after the anger has consciously disappeared. The recall of the situation which had previously excited anger may have little or no feeling; merely indifference is present. Sometimes feelings of resentment and dislike are observed, while at other times, there is amusement. It frequently happens that while the situation which has previously excited the emotion may be accompanied by indifference upon its being recalled either voluntarily or involuntarily, there follows an emotion of dislike and hate. The incident itself may be almost forgotten, or not recalled at all, but the result of anger is to be observed in tendencies



and emotional dispositions left in the wake of the emotion. An over-critical attitude, with something of a gossipy tendency and hostile suspicion in which the bounds of justice are partly ignored, may long continue to reappear after the emotion itself has passed away and the situation has been forgotten. It is rather probable that a single strong outburst of anger does not leave the hostile emotional disposition in its wake. It is usually the mild anger, preceded by much feeling of humiliation and anger which tends to recur again and again till it has settled to a hostile disposition toward the offender. It is reported in some instances to refer to the offender's way of talking, laughing, manner of walking, his mode of dressing; in fact any chance idea of the offender's behavior may be sufficient to allow a feeling of dislike and disgust to appear.

It may be said that anger which disappears in an unsatisfactory manner leaves an emotional disposition which possesses potentialities of both pleasant and unpleasant feelings. Some persons seem to derive much satisfaction in picking the sores of their unhealed resentments; little acts of revenge and retaliation are suddenly hit upon; even hate may have its pleasures. Small acts of revenge and retaliation are observed with an affective state which cannot be called anger, but the subject is aware that it refers to the anger which is passed. One subject became severely angry at his grocer and went to trade with another merchant near by. He states that on several occasions just after the anger, when buying at another place he felt pleased at the other man's having lost his trade. Once he observes, "I believe I bought several things I did not need, I felt I was retaliating and enjoyed it." The emotional disposition following anger may be a source of rather intense enjoyment. Laughter and mirth are observed with the appearance of an idea that has humiliated the offender. In such cases the laughter is purely spontaneous with no recall of anger. Subject J.

broke out laughing when told that X. was on unfavorable terms with Y. His laughter, he observes, referred to a resentment a few days before against X. In fact laughter frequently springs rather suddenly from the mental disposition which has followed from anger. Such cases afford another instance of the close intimacy of our emotions with each other. The residuum of potential feelings from an emotion of anger appears in the form of less active pleasantness.

There is a relation between the immediate after-period of anger and the more remote one that is important. If anger is immediately followed by such emotions as pity, shame, regret or fear, any positive tendency left over in the remote after-period from the emotion itself is apparently lacking. There is, however, a negative effect. The subject is immune to re-experience the same emotion from the same emotional situation again, but anger which has disappeared with unpleasant feelings may tend to recur in a rather prolonged after-period and may finally settle into an emotional disposition and mental attitude which play an important role in behavior and later feelings. It seems to be true, that when anger disappears consciously in such a manner that the subject is aware that his wishes have not been satisfied and the disappearance is followed by unpleasant feelings, the immediate after-period is rather barren as compared with the out-cropping which appears in a more remote period after the emotion. In anger, when sudden control is required, the subject is forced to attend to something else or react contrary to the emotional tendency to save himself a later humiliation. The immediate after-period is usually one of unpleasantness and tension. Under such circumstances, the tendency to recur again and again is characteristic and if, in some later recurrence or expression through the imaginative process, it does not end satisfactorily, it may settle down to an emotional disposition and mental attitude.

Anger that arises from a fore-period of irritation in which the subject suddenly bursts out with emotion may have an immediate after-period of irritation, but it leaves little in the remote after-period; the subject is aware that the emotion is finished. Anger which ends with active pleasantness of victory leaves an attitude of confidence and success toward the situation which has excited the emotion. There is little tendency for the emotion, disappearing in this fashion, to reappear except in its pleasant stage. With a consciousness of complete victory in the immediate after-period, there is established an attitude of positive self-feeling and confidence toward the situation exciting the emotion so that a practical immunity against the reappearance of anger in its unpleasant stage is reached as a negative result of the emotion. There are wide individual differences in the ability of the subjects studied to allow anger to disappear, leaving a pleasant after-period. C. reports but few instances in which his anger disappeared with a fully satisfactory result. He consequently has a wealth of emotional dispositions and mental attitudes following anger. On the other hand F. and E., whose anger emotions are less intense, are early able either to attain an inner victory or to react contrary to the emotion and leave an after-period of immunity against its reappearance from the same mental situation. Hence the tendencies and dispositions left over in the after-period of their anger are less. E.'s dislikes are short lived. It is probable that some subjects have acquired the habit of shortening their emotions of anger, short-cutting the unpleasant period of restraint and early acquiring the after-period of relief, humor or it may be indifference, before the emotion has developed far.

*Classifications.* Anger might be classified according to a number of schemes that would serve the purpose of emphasizing its characteristics. From the standpoint of feeling, anger might be classed as pleasant or unpleasant. Some

emotions of anger are observed to be almost entirely pleasant from their early beginning including their final ending. Other cases have fluctuating pleasant and unpleasant stages. There are few instances of anger that have no flash of pleasantness anywhere, in some degree before the emotion is finally completed. The unsatisfactorily expressed emotion is almost entirely unpleasant. Even anger of this kind usually shows some flash of pleasantness or relief at the moment of the angry outburst.

Secondly, anger might be classified as exciting or calm. The exciting anger has greater tension during the period of the emotion proper. There is usually less co-ordination and greater intensity of feeling which may be either pleasant or unpleasant. The motor reactions are more prominent than the mental reactions. On the other hand, calm anger usually has a longer observable fore and after-period of the emotion. Mental processes are intensified, the motor expression is correspondingly less.

Anger may be classified according to its function. The emotion may be merely an end in itself. It relieves the tension of unpleasant feelings. It is purgative in its effect in removing an unpleasant mental situation. The underlying purpose of such anger is not to increase volitional action, in fact, it may disturb coordination to any purposive end. This type serves primarily to remove the tension of unpleasant accumulations of feelings in some act of expression. If successful in its purpose, it may have an indirect hygienic effect on mental action. Further, anger may be of a kind which intensifies volitional action, accomplishes work, and serves the end of survival. A residuum in mental attitude and emotional disposition follows, which has possibilities either of morbidity or a source of energy which is sublimated into work.

Anger may be classified genetically on the basis of sentiments which are violated in its origin. Anger which

springs from a thwarting of desires is primary in its origin. This is the usual type of anger of young children and animals. Anger which has its source in the self-feelings, such as the sentiments of honor and self respect and in social feelings, of injustice, of fairness, are genetically later in their development.

*Types.* Three rather definite types appear. First is anger which rises from a fore-period of irritable feelings. It develops by a cumulative process of irascible feelings, through a series of stimuli till the point of anger is suddenly reached. An idea is present at the point of anger which serves as a vehicle of expression. It may be an idea not directly associated with the situation exciting the emotion. In fact an apparently irrelevant idea may break the crust of unpleasant feeling tension and serve as an objective reference for the emotion. Anger of this type is scattered. It is not necessary that the emotion be referred to the actual thwarting idea, it frequently refers to inanimate objects and often arises from the irritation accompanying pain. The active period of this type of emotion is mostly voco-motor tension and reaction of larger muscles. The immediate after-period may be a feeling of relief, irascible irritation, or other emotions such as pity, shame, regret and fear. Its increased volitional action may establish a mental attitude of caution and determination against a future thwarting when it is finished. A new emotion may arise however from the same background of irritation. The after effects of an emotion of this type are shallow and easily forgotten. It does not leave hate or dislike in its wake, there is nothing left over for revengeful behavior.

A second type of anger is predetermined by another sort of mental disposition. Self-feelings are its source. An idea excites negative self-feeling and anger follows as a reaction with the purpose of restoring positive feelings of self. It usually has a greater proportion of pleasantness than the

type described above. Its end is to attain pleasantness in some form of positive self-feeling, and when that is successfully reached the emotion disappears. Any idea from a subjective or objective source which intensifies positive feelings of self, tends to diminish emotion of this type. The thwarting of a desire, due to the damage and inconvenience done, is insignificant as compared with the thrust that one's pride and self-respect have received. In the type above, there is thwarting of desire; while in this type, there is humiliation. In fact in the latter type, serious inconvenience may be suffered in the effort to heal a wounded self respect. Anger of this type is not so indefinite in its objective reference. It has direct reference to an offender before the point of anger has been reached, and another person or object cannot be substituted with any degree of satisfaction. Anger of this type leaves an important residuum after the emotion has disappeared in the form of other affective processes, in tendencies, mental attitudes and dispositions, some of which have possibilities of morbidity, others mere pleasantness or sublimation into work.

A third type of anger is that which springs from social sentiments involving justice and fairness. It has little unpleasant fore-period and arises suddenly without the initial cumulative feeling development which is usual with the other types described. The point of anger is more readily reached; the emotion is nearer the surface as if it were ready for a sudden rise. The origin of anger of this type is not unlike anger which springs rather suddenly from an emotional disposition left over from the second type described above. The expression of the emotion in this type is less restrained, it is usually reported as pleasant throughout. While anger of this type is sensitive to justice and fairness, the two types above may grossly disregard these sentiments. In its wake is often observed the tendency to reappear. The after-period has not the possibilities of so

intense pleasure as the second type above, nor of morbidity, nor of a disposition capable of being sublimated into work.

The three types above may occur in a rather pure form but frequently they are mixed. When desire has been thwarted or pride has been wounded, a sense of miscarried justice or fairness with reference to self, intensifies the emotion. In addition to lowered self-feeling, the social sentiment of justice and fairness may re-enforce the irascible feelings or negative feelings of self. At times make-believe of offended fairness is assumed to justify the angry behavior, and consequently increases the intensity and allows pleasurable expression when the subject is vaguely aware that the real cause is his own selfish pride which has been wounded.





## EDUCATONAL FUNCTION



## CHAPTER FIVE

### EDUCATIONAL FUNCTION

From the present study, anger may be said to have a two fold functional meaning. First it intensifies volitional action in a useful direction. Second, viewed from the mental conditions under which it occurs, it may be a superfluous affectivity and is largely an end in itself. These two functions are not to be separated. In fact any single emotion of anger in its different stages of reaction may be merely hedonic, it may serve a directly useful purpose or it may be both. These two functional aspects of anger are the basis for pedagogical conclusions.

*Sublimation.* Anger in a modified form has been the theme of the poet and artist. With its running mate fear, it has played an important role in religion. Primitive magic with its self assertive coercion of the supernatural, is not unlike anger. The curse prayer of backward religion is motivated by resentment. A deity with an irascible temper like that of the ancient Hebrews suggests the role of righteous indignation in the discipline of the soul. Plato\* held that anger is at the foundation of the organization of the State. Ribot (16) has suggested that it is at the basis of justice. More recently Bergson writes, "No society can reach civilization unless throughout its members, there exists the nervous organization which supports the sentiment of anger and hostility against criminals; and this physical organization is the foundation of what we call our moral code." President Hall (10), James (13), and Dewey (5) have suggested that much of the best work of the world and the great deeds of valor have been done by anger. Dr. Hall states, "A large part of education is to teach men to be angry aright,—it should be one aim of pedagogy to show

\*The Republic

how the powers of the soul should be utilized.—Man has powers of resentment which should be hitched onto and allowed to do good and profitable work. We should keep alive our emotions and allow them to do our labor.” (From lecture notes.) It has been suggested by Wundt (22), James (13) and Stanley (17) that the function of anger is to increase volitional action. The latter author writes, “At some point in the course of evolution, anger comes in as a stimulant to aggressive willed action. Some favored individual first attained the power of getting mad, in violently attacking his fellows and so attaining sustenance likely in the struggle for food.” The same author further writes, “We take it then that it was a most momentous day in the progress of mind when anger was first achieved and some individuals really got mad.”

Education has to do with the function of anger in human needs, in growth and development and in mental hygiene. Ethics has at times advocated the elimination of anger as if it were a noxious product. From a pedagogical view, it should be cultivated and excited aright. The familiar moral exhortations, “Let not the sun go down on your wrath,” “Love your enemies and do good to those that hate you,” and others like them, are in accord with some satisfactory individual reactions to anger from the feeling side, which have been cited; but their universal application would not always serve the purpose of ethics. In pedagogical practice, they would fall short. A good healthy resentment is, at times, a good thing and should be kept alive. The emotion, if it works, must not die out too satisfactorily at the cost of real effort. There should be a working residuum for the time when it is needed. An injury may be forgiven too quickly and resentment given up too easily. A healthy fighting attitude, increased caution and willed action turned into productive work is often subverted for an immediate satisfactory ending of the emotion. There

are none of the subjects studied but observe this wholesome effect of anger at times. Anger may disappear successfully and satisfactorily on the side of the feelings. The subject may attain the full sense of victory by a number of devices of make-believe, substitution, disguise, etc. An inner victory may be a good thing. In fact, all subjects would, at times, resort to imaginative processes motivated by the feeling and impulsive side of the emotion. A subjective satisfaction may in fact save the day, clear the mental atmosphere, so to speak, and allow mental life to continue along its habitual lines. On the other hand, a subjective victory may become too easy. On the verge of defeat, victory is at times imagined which takes the place of real volition. The fight may be carried too far through the medium of ideas leaving little enthusiasm for actual effort. A too easy habit of excusing the offender at times serves an unprofitable end. Anger should not be cut off too near its beginning by finding excuses too readily for the offender or offending situation. It should at least be allowed to get a little above the initial feeling stage to keep the emotional life alive or there is danger of lapsing into obliviousness to essential rights; mental life becomes too prosaic and commonplace, on a plateau with no capacity to acquire new levels.

A second point of which the writer is convinced, is that in order to study the emotions, especially the deep seated primary emotions like fear and anger, it is necessary to take into account the finer working of the emotion in its feeling and impulsive stage of development and disappearance. In fact, the milder tenuous emotions of anger are markedly important from the educational side as well as psychologically. The normal function of the emotion is better exemplified in the less intense experiences. Anger, as it is usually thought of, is the emotion in its excited uncontrolled stage. Anger, sublimated into keener intellectual and willed action, is no less anger though its affective side is less in-

tense; its reactive side is working in better accord with the evolutionary function of the emotion,—to intensify action in a needed direction. In fact, affective processes of indignation, resentment and irascible feelings which are not called anger in the popular sense, from the scientific side should be considered a part of the anger consciousness. They have the feeling fore-stage of humiliation and an intellectual reaction; the residuum of the affective process has every mark of that victorious satisfaction, which is typical of anger.

Such tenuous emotions are reported to have far reaching results in mental behavior and personal development. One subject, resentful at an implication against the value of his work, considers that it stimulated him to increased determined action and intensified endeavor for several months in order to show the offender he was wrong. A., resentful of X.'s adverse suggestion, put in three days of severe intellectual labor to prove his point. E. observes that a humiliation and mild resentment was a keen stimulus to his ambition. His ambitious behavior, he considers was accompanied by increased friendliness toward the offender. The question was privately put to a number of persons as to the effects of resentment on some of their ambitions in the past. Every person who was asked, after a careful recall, was able to find one and some times several instances of important results of anger of this kind. Some persons from early childhood have habitually reacted to little resentments to beat the offender in an ambitious way. One person with defective eyes early became sensitive about it. Any implication against his defect was always reacted to, he says, by saying to himself, "I will show you I can do more with poor eyes than you can with good ones, and you will be sorry some day." M. 28—"Resentful because the parents of a lady to whom I was paying attention did not approve of me, I determined to make so much of myself that they would be sorry. It was one of the main incentives to my entering on

a career. With this aim I went to the University; I worked hard with success. Many times during the year I would recall the incident and would resolve again and again to show them some day. For two years this idea was pretty constantly in my mind. In the course of four years I now take keen satisfaction in recalling that I have partly accomplished my purpose." M. 25.—"Four years ago a friend whom I admire much, told me that I would never make a scientist. I have resented it ever since and have laid plans to show him, which I have partly carried out. Every once in a while I recall his statement in connection with my work. It spurs me on. I imagine myself sending him a copy of my scientific problem on which I am working." M. 34.—"In my sophomore year in college, I failed to be elected president of our literary society. I became resentful against the one who beat me in the election. This person was ambitious in college contests. I now laid plans to beat him. I went into an oratorical contest first with the sole aim of surpassing him. I did not care about the others. I am certain that I would never have gone into this contest and others if it had not been for a deep set resentment developed against him. I recall yet how in practicing and writing in contests during the two years of my college work my aim principally was to surpass this person. We were good friends all the time."

Such tenuous resentments which persist for years, it may be, against people with whom one is on friendly terms, and which are accompanied by a rather sudden rise in the curve of personal growth, are evidently an essential part of the anger consciousness. Smaller achievements of individual worth are often reported to be the direct result of a healthy sort of reaction from resentment. It is entirely probable that most persons, especially those of irascible disposition, could point to sudden spurts in their own personal development and achievement, which were motivated by anger

which never reached the stage of intense excitability or from the residuum of exciting anger which disappeared unsuccessfully. Freud (9) has taken the view that much of biography should be rewritten to include the part that sexual motives, which have been sublimated, play in personal ambitions. Evidently anger cannot be neglected by one who seeks for motives of personal growth whether biographer or educator.

A too soft pedagogy which would heal over too soon the injury to self-feelings, has its disadvantages. Encouragement at times by superficial means may cut off a good healthy angry reaction which may be needed. In fact a little lowered self-feeling with an irascible response is a good thing and it may be a signal for "hands off," or a little skillful and judicious suggestion. It is frequently observed by the subjects studied that anger at self intensifies a lagging willed action and breaks up interfering habits. A quotation from B. will illustrate. "I turned the anger inward and vituperated against myself for being such a lazy man. The emotion of the moment was relieved and I feel now like getting down to work at the stuff and getting it out of the way." Some subjects work at their very best when mildly angry. Attention and association processes are intensified to the point that real difficulties disappear. Anger in the exciting stage and at a situation too remote from the problem at hand, interferes with mental work. Bryan and Harter (3) in their study of skill in telegraphy, found that the skillful operator may work best when angry, but the inexperienced worker is less efficient. Michael Angelo is said to have worked at his best in a state of irascible temper. The mass of mankind are sluggish and need a hearty resentment as a stimulant. If the circumstances are too soft and easy, the best which is in a man may be dormant; there is no tonic to a strong nature capable of bearing it like anger.



Many a good intellect has lacked the good powers of resentment necessary for the most efficient work. The boy who has not the capacity for anger should be deliberately taught it by some means. Göthe, who was a rather keen observer of human nature, said, "With most of us the requisite intensity of passion is not forth-coming without an element of resentment, and common sense and careful observation will I believe confirm the opinion that few people who amount to anything are without a good capacity for hostile feelings upon which they draw freely when they need it."

*Need of Expression.* The second condition for the expression of anger is that in which reaction is an end in itself. It may be said that while on the one hand from a genetic and utilitarian point of view the function of anger is to do work, to aid in behavior, where increased willed action is needed; on the other, the mere expressional side in connection with feeling and impulse assumes an important role in every emotion. In fact with intense and exciting anger, utility may be ignored and actually thwarted, volitional action is exerted contrary to objective needs.

There is much in the expression of anger in both the subjective and objective reaction to the emotion whose impulsive aim is merely to release unpleasant feeling tension, to clear the mental atmosphere, so to speak. A brief resumé of the reactive consciousness to anger will illustrate. First on the feeling side there occurs a mental situation accompanied by a tendency to expression in order to remove or modify the situation. Irritation may be relieved or turned into pleasantness by the reaction. Lowered self-feeling may be restored with extra compensation in pleasurable feelings of victory, if the reaction has been successful. Second, the expression of anger involves restraint, the cruder unsocial tendencies are controlled and others are substituted of a less objectionable and offensive nature. By both objective

and subjective reactions, devices of disguise, transfer and modification of the unsocial pugnacious tendencies may allow the restraint to be released and the emotive tendency fully satisfied, in which a feeling of pleasantness follows. Third, the reaction which has been fully satisfactory from the feeling side, is followed by a partial or complete immunity against the recurrence of the anger from the same mental situation, as the successful reaction has removed the mental situation from which the emotion arose.

Anger from the point of view stated above, touches upon the second educational aim. So large a part of the reactive consciousness to anger is motivated to find a successful surrogate for cruder and unsocial tendencies which are objectionable, that this side of anger expression is educationally important. It is a desirable personal equipment to have strong potentialities of anger. However there should be a mentality which is versatile and active enough by training and habit to react successfully to the emotion, in the first place to use such reservoirs of energy for work, and second, to react satisfactorily from the feeling-side, where the instinctive tendencies are restrained, and break up morbid and unpleasant mental tension which may be an inference.

A good angry outburst at times may be a good thing, but most frequently some sort of surrogate is more satisfactory. Habits of witticism, refined joking, a little good-natured play and teasing within the limits of propriety serves a worthy end for mental hygiene, and often leaves a basis for good will and a friendship which would otherwise be in danger. The habit of suddenly breaking up an angry tension by a good thrust of wit or joke would be a good one to inculcate with the irascibly inclined. Many persons suffer in feelings and lack of good friendship because they have never learned to be good mental sparring partners and to relieve their emotions by socially appropriate reaction rather than by a method of repression which is cheaper at the moment but more expensive

in the end. Their anger is too absorbing and serious. It lacks the necessary flexibility, their emotions are too near the instinctive level and when the instinctive tendencies are restrained they lack mental habits of purging their feelings in a satisfactory way, consequently suppression is resorted to as a self-defense.

*Anger and Instruction.* As Terman (20) has pointed out, the emotions employed in the act of instruction need a systematic investigation. The emotions brought into play in school control, as incentive to work, emotional reactions which retard, and those which accelerate learning and efficient work in classes, these are little known scientifically.

Anger, or, perhaps, better potentialities of anger in both teacher and pupils, is impulsively used in the role of teaching. Skill in using this emotion aright is part of the teacher's stock in trade. Pugnacity in the form of rivalry is a common device.

*Individual Differences.* First, there is the problem of individual differences in the emotional life of students; and the teacher, too, for that matter. With some, the dominant emotion is fear and anxiety. The material of the present study shows a wide variation in the type and character of emotional reactions of the subjects studied in which anger is one of the most frequently occurring emotions. This difference is illustrated by the following summary from three subjects: With J., anger predominates over fear; he knows but little of the latter emotion. Anger usually occurs from a fore-period of lowered self-feeling, the feeling intensity of the fore-period is not strong. The reactive stage of the anger does not reach a high degree of excitement. With him, anger usually disappears into indifference and unpleasantness, leaving tendencies of passive dislike. He observed no cases of anger at injustice or unfairness except when the latter sentiments referred to himself. His anger for the most part is an unsuccessful experience and is un-

pleasant. He consequently tries to avoid getting angry and has relatively few emotions. The after-period of his anger tends to be a little morbid, lacking any strongly marked disposition which is the source of tendencies to do more work. Subject G. has anger as a dominant emotion over fear. He scarcely knows anger which arises from a fore-period of humiliation except anger at himself when he has been inefficient. He does not hold resentments against persons but against situations and principles. Anger is usually unpleasant except a mild after-period of relief. With him, anger is a means of throwing off superfluous feelings of irritation and serves but little the purpose of work, except to increase volitional action for the moment. His anger often refers to himself. Anger at unfairness tends to refer to the principle rather than to the person. The emotion occurs more frequently when he is unwell. It is rather slow to appear, by a gradual accumulation, till the point of anger is reached; the emotion does not attain a high degree of excitement. With subject C. the character and type of anger reaction is in marked contrast to the two subjects mentioned above. He knows but little of fear except in extreme situations. His anger nearly all springs from a fore-period of humiliation and is often intense in its most active stage. For a time during the most intense stage of the emotion, he almost loses the sense of justice; but as the emotion begins to die down, he has a habit of excusing the offender and looking at his side of the question. His anger is frequently followed by pity, remorse, shame and fear. The emotion is both pleasant and unpleasant. The disappearance is usually unpleasant and leaves a wealth of affective tendencies and mental attitudes which are later a source of both pleasant and unpleasant feelings. Anger is one of the greatest stimuli he has to do work. He will work for days preparing some subject in which he has had opposition that excited his resentment in order to even up with the offender, and

takes extreme delight in making his point. His tendency to anger is greater when feeling well pleased with himself. The residuum of his emotion involves attitudes of determination and idealization which plays an important role in his ambition in general.

The description above will suffice to show the problem in individual differences in emotional life. With some subjects fear is the ruling passion. Subjects A. and B. have almost an even proportion of fear and anger during the period of observation. However these instances represent adult persons. How far the habitual emotional reactions are determined by training and instruction, is an important question. It is highly probable that the character of training in childhood and early adolescence plays a leading part. Subject C. above was an only child and took considerable license, almost getting beyond the control of his parents at an early age. J. reports that at early adolescence, anger was much more frequent and intense than at present. He believes that an early philosophical notion that intelligence should dominate the emotions, had an influence in establishing his present emotional habits. G. was early taught that it was sinful to get angry, an idea which he accepted at the time. His anger rarely refers to persons but vents on objects, principles and situations involved. He has relatively few emotions of anger. He believes that his early religious training was of importance in moulding the habitual reactions which he now assumes when angry. Such material as we have makes it entirely probable that a large part of the habitual mental reactions assumed in anger is the result of training. It may be said further that when instruction involves affairs of emotional life, individual difference become a still more pressing problem than when intelligence is the criterion.

Other inferences of the role of anger in the act of instruction are suggested from the present study. If the teacher

himself does not possess the ability of well defined resentment against an infringement of fairness, advantage of this defect may be taken by the alert pupil unless there is compensation for it in another direction as by the principle of co-operation, by love or pride appealed to. Cooley however puts the matter a little too strongly when he says, "No teacher can maintain discipline unless his scholars feel that in some manner he will resent a breach of it." (*Human Nature and the Social Order*, Page 244.) The method of school control itself refers to some extent to the individual emotional life of the teacher, as well as pupil.

When anger enters into the role of discipline, of the three types already discussed, that which springs from the sentiment of justice is most efficient in instruction. Anger which arises from irritable feelings, from its nature becomes a dangerous emotion to be used in discipline. Emotion of this type develops by a cumulative process till the point of anger has been reached. It too readily ignores justice and is easily transferred from the real offender and may finally break out against an innocent party who may have unwittingly touched off the feelings which have been accumulated by previous stimuli, consequently anger of this type which is so frequently displayed in school rooms usually defeats the ends of discipline. Anger with a fore-period of lowered self-feeling because of the personal element entering into this type of anger and the tendency to ignore justice can evidently be resorted to but sparingly in school control unless it also involves the sense of justice.

Another point the teacher has to take into account is that from his position, if he is held in respect, the anger he excites in the student will usually be preceded by humiliation and, if he has been unfair, it will be intensified by the sense of offended fairness. Anger of this type is the one most frequently followed by an emotional disposition against the offender. It is the residuum of unsuccessfully expressed

anger of this type which becomes a disturbing element in school control with the student who is irascibly inclined. The wise teacher who understands the individual emotional life of the pupil and the nature of the after-period of anger, will skillfully remove the morbid residuum and ally the resentful pupil on his side. Dislike following anger, is skillfully removed, will frequently increase the friendship of the offender more than before the offense. This principle of compensation in the after-period is thus to be utilized in discipline. It may be a good plan deliberately to bring a moody pupil to the point of anger and let him vent his wrath. Any punishment in discipline has the possibilities of being dangerous to school control, especially with the student of pugnacious disposition, if the justice of the punishment cannot be recognized by the offending pupil. Evidently a mistake in control is not to recognize the individual differences in emotional life and to attempt to use the discipline of fear with an irascible boy who knows no fear. Anger, disappearing unsuccessfully, may leave a morbid residuum which completely disqualifies the student for efficient learning, consequently when it exists, it is the business of the educator to remove the morbidity, transform it into work or to have the pupil transferred; for it may be as serious a hindrance to learning as adenoids or defective sense organs.

There is every reason to believe that a large part of the mental reactions to anger is individually acquired habits, consequently successful and satisfactory reactions are a matter of training. Potentialities of anger may actually be taught indirectly by building up the sentiments and mental disposition from which anger arises. Whatever will increase ideals and new desires, achievements in school which allow a better opinion of self and build up the sentiment of self-regard, of fairness and justice, are at work at the very root of anger consciousness. The study of the mental situ-

ation from which anger arises allows every reason to believe that when there is a lack of potentialities to anger, it may be built up in this indirect manner. The student who lacks good healthy resentment when the proper stimulus is at hand evidently is weak in the sentiment of self-regard, desire to achieve, or sense of fairness.

Whatever exercises will excite the pugnacious instinct, if done satisfactorily may involve a training in emotional habits. Habits of good fighting in work and play, the give and take in debate, class discussion, the witty retort, boxing, the team games if carried on aright, afford good exercise for the emotions. To acquire good habits of behavior when under fire, to fight clean and to the finishing point, to take defeat in a sportsman-like manner, are valuable acquisitions educationally whether they are acquired in athletics or the rivalry of intellectual work. On the other hand, athletics and mental contests may be carried on under conditions of emotional reaction, which defeat the aim of healthy emotional habits and consequently lack their better educational significance.



## BIBLIOGRAPHY



## BIBLIOGRAPHY

1. ACH, N. *Ueber die Willenstatigkeit und das Denken*. Eine Experimentelle Untersuchung mit einem Anhang: Ueber das Hippsche Chronoskop. Gottingen. Vandenhoech and Ruprecht. 1905.
2. BAIN, ALEXANDER. *The emotion and the Will*. Third Edition. London. Longman. 1875.
3. BRYAN, W. D. AND HARTER N. *Studies in the Physiology and Psychology of the Telegraphic Language*. Psychological Review, Vol. 4: 27-58.
4. COOLEY, C. H. *Human Nature and the Social Order*. C. Scribner's Sons. 1902.
5. DEWEY, JOHN. *Psychology*. New York. American Book Company. 1890.
6. DEWEY, JOHN. *The Theory of Emotions*. Psychological Review. II. pp. 13-32.
7. FERE, C. *L'anlithese danse' expression des emotions*. Rev. Philos. 1896. XLII, 498-501.
8. FREUD, S. *Der Witz und seine Beziehung zum Unbewussten*. Leipzig und Wien F. Deuticke. 1905. pp. 205.
9. FREUD, S. *Drei Abhandlungen zur Sexualtheorie*. Wien. Deuticke. 1910.
10. HALL, G. STANLEY. *Adolescence*. D. Appleton and Co. 1909.
11. HALL, G. STANLEY. *A Study of Anger*. American Journal of Psychology. Vol. 10. pp. 516-591.
12. IRONS, DAVID. *Psychology of Ethics*. Edinburgh. Blackwood and Sons, 1903.
13. JAMES, W. *Principles of Psychology*. Henry Holt and Co. 1896.
14. KULPE, O. *Grundis der Psychologic*. Leipzig Engelmann. 1893. p. 478.

15. McDOUGALL, W. *An Introduction to Social Psychology*. Seventh Edition. London. B. Luce. 1913.
16. RIBOT, TH. A. *The Psychology of the Emotions*. London. Walter Scott Ltd., Paternoster Square. 1897.
17. STANLEY, H. M. *Studies in the Evolutionary Psychology of Feelings...* Macmillan. 1899.
18. STEINMETZ, S. R. *Ethnologische Studien zur ersten Entwicklung der Strafe nebst einer Psychologischen Abhandlung Uber Grausamkeit und Rachsucht*. Vol. 2. Leyden. 1905.
19. TITCHENER, E. B. *Outlines of Psychology*. Macmillan. 1906.
20. TERMAN, L. *The Teacher's Health, A Study in the Hygiene of an Occupation*. Houghton Mifflin Company. 1913.
21. WUNDT, W. *Outlines of Psychology*. Translated by C. H. Judd. Third Edition. Stechert. 1907.
22. WUNDT, W. *Human and Animal Psychology*. Translated by J. F. Creighton and E. B. Titchener. Macmillan. 1896.

## INDEX



## INDEX

Ach: On study of will, 6.

Anger: On voluntary control of, 7; introspection of, 7, 12-13; function of, 8, 68; mental situation giving rise to, ch. I; fore-period of, ch. I; referring to persons, 15, 16, 26; referring to objects; referring to self, 22-23; delayed disappearance of, 23-25; without immediate fore-period, 25-27; behavior of consciousness during, ch. II, 53; vocal expression of, 36-38; attributive reaction to, 33-46; contrary reaction to, 46-50; indifferent reaction to, 50; disappearance of, ch. III, 60-62, conscious after-effects of, ch. IV, 74; classification of, 75, 77; types of, 77-79; education of, ch. V; at servants and children, 15; in relation to justice, 22, 83, 16; after period of, 74, ch. IV; control of, 53, 58, 59; in school control, 91-94.

Aristotle: On education of emotions, I.

Attention: Change of in disappearance of anger, 58.

Attitude: Reaction to anger, 44-46, 58, 70.

Attributive Reaction: In expression of anger, 32.

Bain: On introspective view of anger, 12.

Behavior: Importance in study of emotions, 2, 7.

Bergson: Concerning anger and society, 83.

Bryan and Harter: Effects of anger during practice, 88.

Dewey, John: On relation of instinct and emotions, 12; concerning the function of anger, 83.

Emotion: Function of, 5, 85-88; introspection of, I; import-

ance of structure of, 1; method of study of, 6; factors in development of, 11; initial steps of, 15.

Feelings: Irritable feelings in development of anger, 13, 14-15. *See pleasantness and unpleasantness.*

Feré: Concerning anger with paranoics, 12.

Freud: On sex as a motive in conduct, 88; on theory of wit, 39-40.

Function: Referring to anger, 8, 68, 72, ch. v.

Göthe: On function of resentment, 89.

Gossip: And anger, 39, 42, 56, 59, 72.

Hall: Concerning education of anger, 83; on education of emotions, 84.

Habits: And expression of anger, 95.

Hate: Development from anger, 72.

Individual Differences: In emotional behavior, 59, 75, 91-94.

Instruction: And anger, 91-93.

Introspection: Difficulty of with emotions, 1.

Imagination: A factor in control and expression of anger, 37, 62, 85; invective, 36-38.

Imagery: Visual and motor in expression of anger, 33-35.

Irony: A means of reaction to anger, 36-42.

Irons, David: Appearance of anger, 12; behavior of consciousness during anger, 31.

James, William: On function of anger, 33, 84.

Joy: Following anger, 69, 73-74.

Justice: Facilitates development of anger, 16; ignoring of when angry, 22, 83.

Külpe: Concerning voluntary action and emotions, 12.

Make-believe: In expression of anger, 39, 62.

Magnan: Concerning anger in paranoics, 12.



McDougall: On genetic view of origin of anger, 11.  
Pity: Following anger, 65, 66.  
Pedagogy: Danger of too soft, 88.  
Play: A means of expression of anger, 35-36.  
Pleasantness: A condition of disappearance of anger, 60,  
53, 55, 57, 59; in after-period of anger, 67, 73.  
Ribot: On anger and justice, 83.  
Sarcasm: In expression of anger, 38, 41.  
Self: Imaginary exhaltation of, 43-44.  
Sentiment of Self Regard: Fore-period of anger, 20-21.  
Steinmetz: On danger with primitive people, 12.  
Shame: Following anger, 17, 66.  
Sublimation: In expression of anger, 83-92.  
Swearing: In expression of emotions, 37.  
Titchener: On factors in development of emotions, 11.  
Unpleasantness: During anger, 54, 60, 74.  
Witticism: In expression of anger, 39-42, 58.  
Wundt: Concerning voluntary action, 5, 84.



In compliance with Section 108 of the  
Copyright Revision Act of 1976,  
The Ohio State University Libraries  
has produced this facsimile on permanent/durable  
paper to replace the deteriorated original volume  
owned by the Libraries. Facsimile created by  
Acme Bookbinding, Charlestown, MA



2003

The paper used in this publication meets the  
minimum requirements of the  
American National Standard for Information  
Sciences - Permanence for Printed Library  
Materials,  
ANSI Z39.48-1992.



